

American Gas *Association* MONTHLY

New National Gas Advertising

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Air Conditioning's Challenge

•

Natural Gas Investment Value

•

Gas Predominates at the Fair

•

Nominating Committee Reports

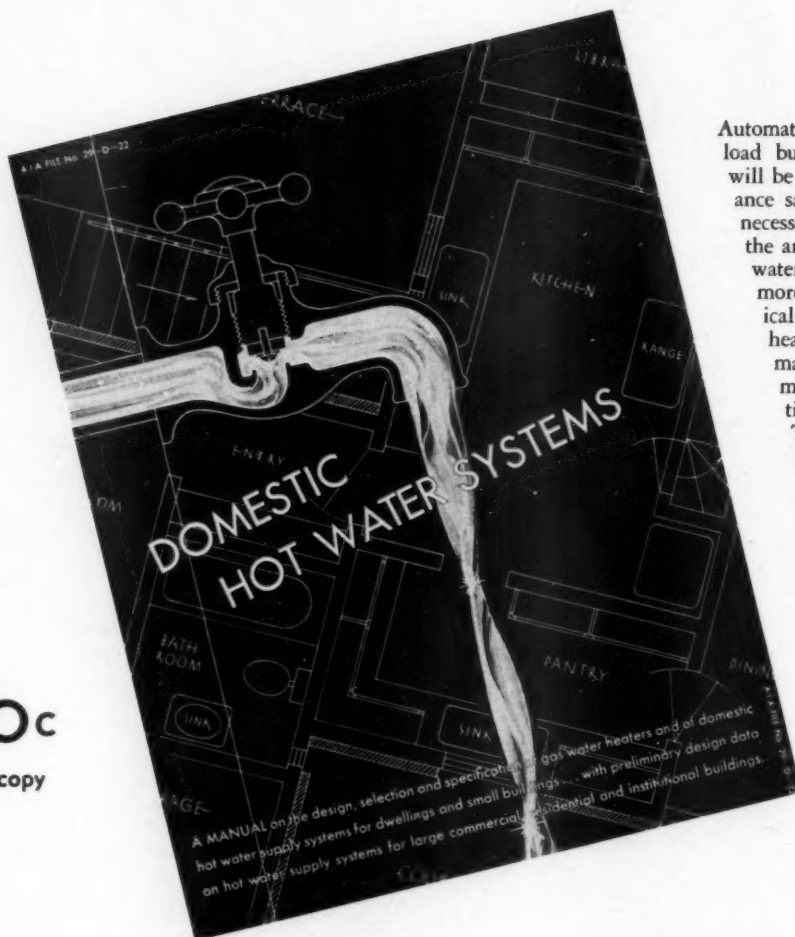
July-August



1939

VOLUME XXI NUMBER 7

BUILDERS' and ARCHITECTS' MANUAL



50c
per copy

Automatic Gas Water Heaters, a vital load builder for all gas companies, will be easier to sell if the gas appliance salesman has at his finger tips necessary information to convince the architect or builder that heating water with gas is more modern, more efficient and more economical than other types of water heating equipment. This information is now available in a manual recently published entitled **DOMESTIC HOT WATER SYSTEMS**. No effort has been spared to give complete and reliable information on the selection, use and installation of gas water heaters for domestic hot water systems in buildings of all types.

The information in **DOMESTIC HOT WATER SYSTEMS** is so arranged that it is easily and immediately available. An index in the front of the book lists the various subjects treated and the pages where they will be found. Interesting photographs, graphic tables and sketches, and placement material, all combine to make the manual of real value.

The manual includes chapters on the advantages

of gas for water heating, selecting the heater and system, types of gas water heaters, designing the water heater system, and the architect's specifications for gas hot water supply.

The manual, in short, gives to the architect, building designer and gas appliance salesman practical data in the job of selecting the type of gas water heating equipment most appropriate to the conditions surrounding any project.

ADDRESS ORDERS TO WATER HEATING COMMITTEE
AMERICAN GAS ASSOCIATION, 420 LEXINGTON AVE., NEW YORK, N. Y.



CONTENTS FOR JULY - AUGUST 1939



In three years, a very short time as advertising campaigns go, the gas industry's cooperative program has made astounding progress. There are many concrete, tangible results, but undoubtedly the greatest gains are intangible, such as added prestige, good will, and increased acceptance of gas as the most modern and versatile fuel. Mr. Strickler, who has guided the program from the beginning, tells the complete story of the 1939-40 program in this issue. . . . When a nationally known banker says the natural gas industry has reached the highest credit standing in its history, that's real news. When he backs up his statement with reasons why, that's important to our industry. Don't fail to read Mr. Denton's penetrating analysis. . . . The man who knows the air conditioning market, Charles R. Bellamy, paints a heartening picture of a great opportunity. . . . Those who attend the A.G.A. convention in New York next October will see at first hand the dominant position of gas at the World's Fair as described by Mr. Cuthrell. . . . Doubting Thomas's of the gas industry should digest Past President Paige's able paper presented in England and reprinted here. It exudes optimism based on sound reasoning.

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AMERIGAS, NEW YORK
American Gas Association Testing Laboratories
AMERGASLAB, CLEVELAND

**TODAY 16,000,000 WOMEN
(MORE THAN EVER BEFORE)
ARE COOKING WITH GAS...**

Last year alone, 1,013,000 women joined the nation-wide swing to modern Gas Ranges

Why this overwhelming preference? Because the modern Gas Range offers women *everything they are looking for* in an up-to-the-minute, automatic cooking appliance!

Speed—Gas has always been *fast*. And now new-type top burners... fast pre-heating ovens and broilers save you *still more* time.

Economy—You save on food and fuel with a modern Gas Range. Scientific insulation, more efficient burners and

low operating cost make Gas cooking *thriftier* than ever.

Beauty and Cleanliness—The new Gas Ranges are the most beautiful ever designed. Gas cooking is *clean* cooking—and the porcelain-enamel range itself is kept sparkling with a flick of a damp cloth.

Finer Cooking Results—Controlled oven temperature, simmer burners, high-speed smokeless broilers help you create more delicious, healthful meals.



Only GAS gives you all these advanced Range features

CLICK SIMMER BURNER—Dependable low economy flame with "click" signal for waterless cooking.

AUTOMATIC LIGHTING—No matches to strike—No waiting—Instant heat.

GIANT BURNER—For fastest top-stove cooking. Extra wide heat spread for large utensils.

NEW TYPE TOP BURNERS—Direct flame toward bottom of utensils—save gas—won't clog.

Add to these time and work saving features, the *proven dependability* of Gas as a fuel, and you'll see why more women choose modern Gas Ranges. See them at your Gas Company showroom or Appliance Dealer's.

The CP Symbol on a Gas Range assures you that you are getting all of the 22 super-performance standards established by the American Gas Association. It signifies the "Certified Performance" of the Range that carries it—whatever make you buy.



SMOKELESS BROILER—Perforated grill keeps fat away from flame. Eliminates smoke.

HEAT CONTROL—Assures exact oven temperature required. No more "guess work" baking.

FAST PRE-HEATING OVEN—Reaches highest oven heat in fraction of time required by ordinary ranges.

SLOW-ROASTING OVEN—Holds 250° for "long term" cooking. Temperature doesn't creep up.

GAS

**SERVES YOU
BETTER
THROUGH MODERN
GAS APPLIANCES**



**—AND FOR COMPLETE COMFORT,
HEAT YOUR HOUSE WITH GAS, TOO**

Automatic Gas heat settles the house-heating problem forever! It needs no looking after. Gas presents no fuel delivery or storage problem. It is *clean* heat. The Gas unit operates without noise—is handsome and compact. In fact—Gas is the ideal modern fuel for house-heating and air-conditioning. You'll find the cost surprisingly low. Ask your Gas Company for complete details.

AMERICAN GAS ASSOCIATION

LET GAS DO THE 4 BIG JOBS—COOKING • WATER HEATING • REFRIGERATION • HOUSE HEATING

(This first advertisement in the 1939-'40 series will appear in the September issue of national magazines)



JAMES M. BEALL, *Editor*

GAS ADVERTISING

... Plans for 1939-40 National Campaign

THREE years ago the gas industry launched its program of national cooperative advertising supported by some 700 gas and gas and electric operating companies. The program has been carried on continuously since July 1936 and sentiment is stronger for it now than at the beginning.

The objective of the advertising is clearly defined—"To promote public acceptance of gas as a modern, efficient fuel for household, industrial and commercial purposes for which heat is required"—and the Committee on National Advertising has hewed to the line in shaping the program to meet that objective. Progress has been made—lots of it. I hope and believe that national advertising is a permanent institution in the gas industry.

One of the most satisfying accomplishments credited to the program, and one that was not so clearly foreseen when the program was initiated, is the important part it has played in improving the morale of the rank and file of our business.

For three years now we have presented ourselves to the public as a modern, wide-awake and thoroughly progressive industry, without apology as the first in its field. This so-called prestige advertising that we have been doing has created among us a new self-respect and pride in our industry, which, in turn, is being reflected in a new respect and estimate of us on the part of the public. The two always go hand in hand.

The evidence supporting this statement and others to follow comes from gas men in every section of the country whose unsolicited comments on the value of the program are on record at headquarters. In other words, I am merely repeating what others have said as a result of watching the impact of this program on their own personnel.

We have conclusive knowledge that those who are staking their future on the gas business have a greatly improved

By T. J. STRICKLER

*Chairman, Committee on
National Advertising*

mental attitude since the program got underway. We have seen our competitors advertising themselves for so long and so effectively that it is both comforting and stimulating to see our

own business occupying a place in the spotlight. That has helped tremendously in building morale.

Representatives of financial houses, life insurance companies and others in high places have a better opinion of us and our securities today as a result of our decision to interpret ourselves nationally, and have so expressed themselves to the executives of gas companies. That also helps.

The national campaign has stimulated the appliance manufacturers to step-up their own advertising. It has made the housewife more responsive to the selling appeals of the gas company salesman. In creating a desire for the newest and best of the modern gas appliances it has paved the way for sustained customer satisfaction and good-will.

The local operating companies and their dealers now have something of national sales significance on which to hang their local sales drives. In some quarters competition has been placed on the defensive whereas previously it was in the saddle. All these developments help.

The expansion of our industry in 1938 is indeed heartening. We can justly be proud of the fact that today we are serving more customers than ever before.

One way to increase our business is by adding customers, but of equal or perhaps even greater importance is to get our per customer sale of gas on the increase. Back in 1929 a downward trend in the use of gas per domestic customer became evident and continued for nine consecutive years. That decline has been of vital concern to all of us.

The upturn came in 1938. Slight though it is, this reversal of a long-term downward trend to an actual upswing is most significant and encouraging. The latest available figures of domestic gas sales for 1939 indicate an increased

Committee on National Advertising and Subcommittee on Approval of Domestic Gas Copy



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Chairman



George F. Mitchell
Vice-Chairman



Conrad N. Lauer
Ex-Officio



Herman Russell



J. F. Pollard



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R. H. Fite



C. G. Cassidy



W. R. Squier



W. G. Wiegel



Ray T. Ratliff



Anthony Hyde



C. W. Person
Secretary

momentum upward in domestic customer use.

May I take this occasion to emphasize the fact that the increase in the use of gas per domestic customer came precisely at the time when the industry's national advertising program was getting into full swing. I will leave it to you to judge whether this development does not constitute a tangible result from the advertising drive, both by its direct influence on the public and by virtue of its having helped to instill throughout the gas industry a do-or-die spirit to sell both services and appliances with renewed confidence and vigor.

Let it not be forgotten, however, that a most important phase of our national advertising effort is devoted to the advertising of gas fuel for commercial and industrial purposes. This advertising has been of great value in retaining old business and in securing new business and has made the way easier for all commercial and industrial gas salesmen, by stressing the fact that gas is a modern fuel and that it is growing in acceptance and in favor in all types of commercial and industrial establishments.

Advertising Brings Results

A review of the national advertising which the gas industry has done over the past three years will, I believe, convince even the most skeptical that a good job has been done—that the investment has brought real returns. Results are evident in terms of better industry morale; an upturn in the per customer use of gas which is apparently the start of a continuing upward trend; stimulation of appliance sales, particularly helping in the big job of replacing the 10,000,000 obsolete gas ranges on our lines; backing up the introduction of the CP range and helping to make that far reaching industry

Resolution Adopted by the Executive Conference of the American Gas Association, San Francisco, May 16, 1939

RESOLVED, that the Executive Conference of the Advisory Council and Executive Board, in session at San Francisco, May 16, 1939, heartily approves and endorses the national advertising program now nearing the end of its first three-year period, and commends the committee in charge for its splendid work.

BE IT FURTHER RESOLVED, that the Conference strongly recommends that the national advertising campaign be aggressively continued, and that company members be further urged to take full advantage of all tie-in opportunities of the campaign, thereby materially increasing the effectiveness of this activity.

development a real success; and finally results in building up public prestige for our product and our industry. And now we are taking another forward step—launching the campaign for its fourth consecutive year.

The campaign for the next advertising year, starting in September, was reviewed and approved by the Committee on National Advertising at its meeting in San Francisco, May 15. McCann-Erickson, Inc., of New York, is the agency. The 1939-40 messages interpreting our industry and its product and appliances to the American public have been most carefully weighed and considered with the advisory help of the Subcommittee on Copy and our agency. Our basic policies are unchanged although the technique has, we think, been improved and our messages more directly keyed to the new spirit of progress that our industry is enjoying.

Prior to shaping copy plans for the new year, we first studied the effectiveness of the advertisements produced since the beginning of the campaign. Reports of periodic consumer check-

ups of the observation and readership of the advertising made by an independent organization form the basis of this study. The following facts were clearly established:

Advertisements which included modern kitchen illustrations ranked highest in consumer observation and attention.

The news type of headline ranked highest in headline readership.

The four-color advertisements (1936-'37 campaign) got sufficient increased observation and consumer interest to justify the added expense of four-color copy as distinct from two-color copy.

With the above findings established, another consumer check-up was made by an independent research organization to determine changes in the attitude of housewives towards gas and gas ranges since the advertising program started. This check-up revealed the following:

Gas Preference Gains

We found a definitely higher degree of loyalty toward gas on the part of present gas users than was the case two years ago. In other words, a substantially higher percentage of women would choose a gas range today in preference to an electric range than was the case two years ago.

We found women more familiar, to a marked extent, with the advantages and operating features of the new gas ranges as compared with two years ago. These advantages and operating features were the particular points stressed in the advertising copy.

We found that great strides have been made in winning women's appreciation of the new gas range features as stressed in the advertising. We refer to such points as cooking speed, broiling results, baking results, dependability of fuel, flexibility of top burner heat, attractive appearance, safety, cleanliness, etc. On every one of 14 such points checked, gas had

FOUR-YEAR COMPARISON OF NATIONAL ADVERTISING

	1936-37	1937-38	1938-39	1939-40
Participating Companies	694	717	708	718
Meters in Service	11,369,414	11,050,000	11,161,483	11,501,727
Subscriptions	\$454,776.00	\$442,000.00	\$456,962.22	\$466,984.08
Magazines Used	26	32	32	29
Number of Insertions	188	207	218	267
Total Circulation	13,770,394	18,442,000	17,466,843	17,918,942

made definite progress in winning greater appreciation on the part of housewives. Conversely, on 10 of the 14 points, the electric range was shown to have lost ground.

From this consumer check-up we drew two conclusions that have a direct bearing on the planning of the new advertising copy. First, it seems evident that winning a new appreciation of women for the various automatic and convenience features, as well as for the attractive appearance of the new ranges, gives them an over-all increased appreciation of gas as a cooking fuel as distinct from competitive fuels. Secondly, it seems clear that the copy policy of stressing these features (by such devices as the check list of features and advantages used in the current advertisements) has been a correct and effective one and should be continued.

With this background of study we set up a copy platform or formula to follow in the actual preparation of the new advertisements. An outline of this platform follows:

We have aimed to add an institutional flare to the new advertisements—or more specifically to make these ads reflect a progressive industry and demonstrate leadership of our product in its field. The devices to accomplish this are: the

CONSUMER MAGAZINES

GENERAL

	Circulation
Saturday Evening Post.....	3,060,321

WOMEN'S MAGAZINES

Good Housekeeping	2,258,496
Woman's Home Companion	3,076,711
McCall's	2,842,125
Ladies' Home Journal.....	3,070,912

HOME SERVICE MAGAZINES

American Home	1,500,000
Better Homes & Gardens....	1,850,000

17,658,565

TRADE AND PROFESSIONAL MAGAZINES

Architectural Forum	37,425
American Builder & Building Age	35,672
Forecast for Home Economists	22,375
Gas Appliance Merchandising	7,310
Journal of Home Economics	7,595

110,377

use of four colors; simplification of layout treatment; high-lighted facts in each advertisement about the modernity and progress of gas and gas equipment. To profit by the study of the extent of consumer interest in past advertising and use, modern kitchen illustrations and news type headlines which have been characteristic of the highest ranking ads. To continue to stress the important operating features of the new gas ranges, since the consumer check-up referred to demonstrated that this has been effective in past advertising.

To give maximum identification to the advertisements by boldly displaying the word "Gas" in the headline of each ad and also in the display slogan "Gas serves you better through modern gas appliances."

To unify and add strength to the campaign by means of stressing in each advertisement one other use of gas in addition to cooking and to continue in each ad the base line slogan "Use gas for the 4 big jobs—cooking, water heating, refrigeration, house heating."

In utilizing four colors for next year's advertising we believe our messages will be unsurpassed in enthusiastic quality and modernity in the magazines in which they appear. We will have to trim our magazine list somewhat to accommodate the four-color advertising, but this will cause no curtailment of circulation and only a very slight reduction in total consumer advertising messages for the coming year. The total circulation of our 1939-40 consumer magazine list is 17,658,000 per issue and the consumer campaign as a whole will send 95,765,000 full color messages into American homes during the year. That is a substantial volume of advertising. Every magazine on our list is a high class magazine selected on its merits as representing the best to reach our industry's markets.

DOMESTIC GAS ADVERTISING FOR 1939-40

	1939						1940						
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	
General													
Saturday Evening Post		21 x	18 x		20 x		16 x	20 x	18 x	15 x			
Women's Magazines													
Good Housekeeping		x			x			x			x		
Woman's Home Companion	x		x			x		x		x			
McCall's		x		x			x		x			x	
Ladies' Home Journal	x		x			x		x			x		
Home Service Magazines													
American Home	x	x		x		x			x				
Better Homes & Gardens	x		x		x		x			x			
Trade and Professional Magazines													
Architectural Forum	x	x	x		x	x		x	x		x		
American Builder & Building Age		x		x		x		x		x		x	
Forecast	x	x			x	x							
Journal of Home Economics	x			x			x			x			
Gas Appliance Merchandising	x			x			x			x			



THE BROWNS WENT EAST...

© N.Y.W.F.



THE SMITHS WENT WEST...



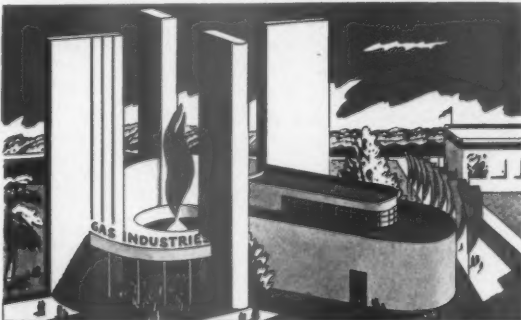
Architect: Dwight James Baum. Landscape Architect: Michael Rappene

"**HOMELAND**"—THE ALL-GAS—GOOD HOUSEKEEPING HOME was the high spot of the New York Fair to the home-loving Browns! They were delighted with the way the "Good Housekeeping" editors had adapted Regency architecture and furnishings to modern living. And how Mrs. Brown revelled in the automatic gas equipment that made housekeeping easier than she'd ever dreamed. She adored the modern gas range, gas refrigerator, compact gas furnace and air-conditioning unit that shared the sunny laundry with the gas-operated water-heater and laundry dryer!



Architect: Vincent G. Bonay. Landscape Architect: Better Startevant

THE ALL-GAS "SUNSHINE HOUSE" at the Golden Gate Exposition drew the Smiths like a magnet each day of their stay. Before their eyes this modern \$6,000 home was actually being built, while experts explained the newest and best in building methods and materials! The Smiths heartily agreed with the choice of automatic gas equipment for the four big home jobs: cooking... water-heating... refrigeration... and house-heating! ("Sunshine House" is sponsored by the San Francisco Chamber of Commerce, building material suppliers and building crafts).



THE COURT OF FLAME AT NEW YORK sends four 90-ft. pylons towering in the skies. The Browns joined the crowds drawn to the Gas Industry's Exhibits by this imposing building. They were glad they did, for they found the displays of automatic gas equipment inside so full of new ideas for greater economy, ease and comfort in home living! Then they adjourned to the auditorium for a respite from sight-seeing and listened while George Rector disclosed choice culinary secrets and the American Puppet Opera Company put on a charming opera with puppet actors.



AT TREASURE ISLAND "GAS ON PARADE"! The Smiths were charmed to find that the air of romance and leisure that pervades the "Island" extends also to exhibits of the most modern equipment. They sat at ease in a flower-decked patio before a revolving stage displaying 7 model gas kitchens. And watched entranced while ranges and refrigerators glided open and closet doors swung out to disclose modern gas water heaters. They took keen interest, too, in the natural color views thrown on the window of each "set", showing how foods cook in modern gas ranges.

LET AMERICA'S 2 GREAT FAIRS
BE YOUR GUIDE—CHOOSE GAS
FOR MODERN HOME SERVICE!

When you eat on Fairgrounds, East or West, 9 times out of 10 your food is cooked by gas. Your dishes are washed with water from automatic gas water heaters. On chilly days, most official buildings are heated automatically by gas. The modernity and efficiency of gas fuel is overwhelmingly demonstrated by its choice at

both Fairs for these essential "housekeeping services"! This goes to show that whether you are concerned with a business building, a public institution or a private home, modern automatic gas appliances offer you the most in time-releasing service and modern comfort! AMERICAN GAS ASSOCIATION

(Special full-page advertisement for the July 29, 1939 issue of The Saturday Evening Post)

EYE OPENERS—by Bob Crosby



Started two years ago, this cartoon feature for newspapers has met with growing popularity

The first advertisement, reproduced elsewhere, tells a strong story and is typical of other consumer advertisements to follow. "Today 16,000,000 Women—More Than Ever Before—Are Cooking With Gas!" "Last Year Alone 1,013,000 Women Joined the Nation-Wide Swing to Modern Gas Ranges." Note how the beautiful four-color kitchen in this first advertisement appeals to the eye. Note the handling of the slogans. Note the manner in which a timely story on gas fuel for house heating is presented.

Some of the future ads in this series contain these outstanding statements:

Gas gave you double quick broiling.
Gas gave you oven heat control.
Now gas brings you an amazing triple improvement in top burners.
The whole cost of cooking now lowered by modern gas ranges. More people are cooking with gas today than ever before.
Now gas brings you the last word in modern ranges for cool, clean cooking. Perform these cooking miracles yourself on a modern gas range.
Gas gives quickest heat—highest heat—steadiest heat.
You get them all—only with gas—the most responsive fuel.

It is our enthusiastic belief that next year's domestic gas campaign, starting with September issues of national magazines, represents the strongest campaign initiated to date.

A special advertisement, executed in two colors and dramatizing the various uses of gas at the New York and San Francisco World's Fairs, has been approved by the Committee for publication in the July 29, 1939, issue of the *Saturday Evening Post*. Some special tie-in material will be made available for the use of local companies in connection with the publication of this advertisement.

It is the Committee's recommendation that three portfolios of sales promotion items be made available to the

industry during the next advertising year. The first portfolio will be distributed sufficiently far in advance of the appearance of the first 1939-40 advertisement to enable local companies to tie-in advantageously with the new campaign. The items to be included in this first portfolio are: a four-color bill insert, a four-color blotter, display card, blow-ups and reprints of the advertising, tie-in newspaper ads in mat form, a photo service sheet, stickers and electros of the campaign slogan and a car card which is also suitable for store display use.

Publicity Activities

One of the most important phases of our program is that part of it devoted to publicity. We were of the opinion three years ago that through publicity, supplementing the advertising, much could be accomplished in changing the attitude of the American people, and particularly the American housewife, towards gas and gas appliances. We felt that publicity would be instrumental in selling the public on the modernity of gas and on the modernity of the appliances which employ gas. At that time we selected three main fields of activity, newspapers, magazines and radio. The intervening years have justified our expectations and have demonstrated that our future efforts should be continued without any departure from the original objectives.

HOLLYWOOD Tell-a-Scoop
BY BILL McDERMOTT

MAGICIANS AWARDED A TROPHY TO **CHESTER MORRIS** FOR HIS NEW FEATS IN MAGIC.

A CUSTOM BUILT GAS RANGE COSTING \$2500 WAS ORDERED FOR ONE HOLLYWOOD PICTURE "FORGOTTEN FACES"

HOLLYWOOD Tell-a-Scoop
BY BILL McDERMOTT

DUSTY A TRAINED HORSE AT MONOGRAM STUDIOS HAS TWO "STAND-INS" "PETE" AND "TIM"

GAS IS USED TO MAKE STEAM WHICH MAKES FOG FOR HOLLYWOOD MOVIES!

HOLLYWOOD Tell-a-Scoop
BY BILL McDERMOTT

\$35 AN HOUR IS EARNED BY MONTH OLD BABIES IN HOLLYWOOD

A TEXAS WOMAN DUPLICATED EXACTLY IN HER HOME THE MODERN GAS KITCHEN FEATURED IN THE PICTURE "Merrily We Live"

This newest newspaper feature subtly drives home the fact that gas fuel and gas appliances set the pace in Hollywood

We know, because we have the results at hand, that publicity has played a significant part in bringing gas to the forefront; in making the housewife realize its advantages; in giving gas the virtue of modernity which it deserves, and in actually changing the thinking of a large segment of the American public toward the gas industry, its product and its appliances. We are in possession of the fact that through our publicity efforts literally millions of American women have been told about the modern, stylish, efficient home which employs gas for the four big domestic jobs.

When, in the short period of three years, we can claim a combined newspaper circulation of 943,766,560, for stories devoted wholly to the exploitation of the advantages of gas and gas appliances, we are amply satisfied. Furthermore, during the same period illustrated articles on gas appliances have appeared in national magazines whose readers number 93,380,000. To complete the picture, 787 individual broadcasts of radio scripts have been made within the three-year period. All of these figures demonstrate the fact that there is a sustained public interest in our industry and that recent amazing developments in gas appliances constitute news worthy of printing.

Starting at scratch, we have seen our news material distributed by the most influential syndicates in the country. The demand for special material for use in special newspaper sections built around local sales drives for gas appliances has increased as the number of sections has grown.

The photographic service, long needed by the industry, is an outstanding ex-



J. P. Leinroth

and E. D. Milener, Secretary, Industrial Gas Section, American Gas Association, New York, N. Y., Secretary.

As explained in this article, the volume of industrial and commercial gas advertising scheduled to appear during the next advertising year, 1939-40, will be expanded in line with additional funds approved for such advertising by the Committee on National Advertising.

ample of how the national program provides material available from no other source within the industry. We have made an excellent beginning in this most interesting of fields, but the opportunities for future development have merely been scratched. We intend to build up this service along already well established lines as time goes on.

Unfortunately, we have been handicapped considerably in placing illustrated articles on gas appliances with national magazines by the fact that so few of our manufacturers are using magazine advertising. The editors of the magazines naturally favor editorially those manufacturers who advertise with them. If more manufacturers were purchasing space in these national periodicals, we could immediately increase the volume of illustrated articles. It is our earnest wish, therefore, that more manufacturers will engage in national advertising in the future.

THAT part of the national advertising effort which is devoted to the promotion of gas for industrial and commercial purposes is prepared and placed by the Advertising Committee of the Association's Industrial Gas Section. The personnel of this committee is as follows: J. P. Leinroth, General Industrial Fuel Representative, Public Service Electric & Gas Co., Newark, N. J., Chairman; F. B. Jones, Director of Industrial Gas Sales, Equitable Gas Company, Pittsburgh, Pa., Vice-Chairman; C. G. Cassidy, Advertising Manager, The Peoples Gas Light & Coke Co., Chicago, Ill.; Henry Obermeyer, Assistant Vice-President, Consolidated Edison Co. of New York, Inc., New York, N. Y.; T. H. Spain, Advertising Manager, Public Service Electric & Gas Co., Newark, N. J.,

Industrial Gas Advertising

With additional funds at its disposal, the advertising promoting the use of gas in the industrial and commercial markets will be expanded during next year, in accordance with the schedule published below. This advertising is supervised by the Advertising Committee of the Association's Industrial Gas Section, with Ketchum, MacLeod & Grove, Inc., Pittsburgh, Pa., serving as agency. Special advertisements are prepared for each field, so that each advertising message is specifically applicable to the readers of each publication. Many gas companies secure extra copies of reprints of the industrial and commercial gas advertisements and use them for direct distribution to their customers and prospects.

The very nature of the industrial and commercial market for gas makes local advertising to these fields by individual gas companies both difficult and costly—and emphasizes the importance of the national advertising being carried on by the Industrial Gas Section through its individualized series of advertisements.

The many different types of prospects in any one community—the relatively small number in each group—the lack of local media that reach any substantial portion of these prospects—the expense of special direct mail advertising for each group—the relative ineffectiveness of general mailing pieces that attempt to interest all groups of prospects—all these factors have tended to limit very materially the amount of local advertising on in-

INDUSTRIAL AND COMMERCIAL GAS ADVERTISING FOR 1939-40

Fields To Be Reached	Publication	Pages
Metal Trade	The Iron Age	12
	Steel	12
	Metal Progress	12
	Metals & Alloys	12
	Heat Treating & Forging	12
Food	Industrial Heating	12
	Bakers Weekly	12
	Bakers Helper	12
	Food Industries	12
Hotel & Restaurant	American Restaurant	12
	Hotel Management	12
Ceramics	Ceramic Industry	12
	Glass Industry	12
Beauty Shop	Modern Beauty Shop	12
	American Hairdresser	12
Institutions	Modern Hospital	12
Printing & Publishing	Inland Printer	12

dustrial and commercial gas, and at the same time to create a real opportunity for cooperative advertising.

In this advertising covering 17 publications in 7 different industrial and commercial fields, the story of gas is told to prospects in nearly every community. It becomes effective local advertising, because national circulation is, after all, simply the sum of the local circulations in a great many communities.

Never before have industrial and commercial gas salesmen had so much to talk about to their customers and prospects, in the way of new and improved gas-fired equipment.

During recent years unusual progress has been made in the development of new and more efficient equipment for industrial and commercial gas applications. This progress has come about through consistent research and developmental work on the part of equipment manufacturers and the gas industry as a whole.

To reach the industrial and commercial gas market with the story of this new and improved equipment; to illustrate and describe important new gas applications; to encourage manufacturers in various fields, to investigate the possibilities of gas for all industrial applications requiring heat—these are the functions of the advertising program conducted by the Industrial Gas Section.

More Tie-in Effort Needed

So much for advertising plans developed and approved for 1939-40. What measure of success will these plans bring to the gas industry? The answer, as all advertising men know, lies with the hundreds of operating companies throughout the country who represent the gas industry to their millions of customers. If the points stressed in the national campaign are relayed to the actual users of gas by the local companies which serve them, then there is perfect coordination and ideal tie-in.

Local company identification with the national advertising drive is not only a most direct way of securing tangible benefits, but it is the only workable combination that has been developed to date. A larger volume of tie-in effort is needed to increase the impact of the campaign on the public.

We believe we offer the gas industry during the coming year the highest type of cooperative national advertising produced since we initiated the movement three years ago. Since this is your campaign and your contributions are being used to finance it, your regional representative on the national committee will welcome ideas, suggestions and criticisms.

Gas Sales Soar

THE Public Service Corporation of New Jersey recently reported some interesting sales results to its stockholders. Total gas sales for the first four months of this year showed an increase of 6.34% in cubic feet and 3.69% in revenue over those of the first four months of last year.

April of this year was the second largest April in the company's history in total cubic foot sales of gas. Total cubic foot sales of gas in that month this year were

less than 2% under those of the best April—1931. Sales of gas for industrial uses were up 13.6% for the first four months of 1939. For the year ended April 30, 1939, the average cubic foot consumption of gas per residential customer was 23,200 cubic feet, an increase of 300 cubic feet per residential customer.

Appliance Sales Record

SOARING high above the previous all-time record, The Brooklyn Union Gas Company's appliance sales, at the end of the first five months of this year, stood at the unprecedented total of \$1,511,991.88.

The five-month figure was more than \$250,000 above the previous high mark, established in the first five months of 1937. It was \$345,498.24, or 30 per cent, above the total for the same period last year.

Never before in the 91 years that gas has been available to the residents of Brooklyn have gas appliances been in so great a demand.

Expanding Markets for Gas Industry Make Investments Sound



P. S. Young

of the American Gas Association. Mr. Young is chairman of the Executive Committee of the Public Service Corporation of New Jersey and a past president of the Association.

After stating the many favorable characteristics of gas industry securities, Mr. Young cited the expanding market for gas. He summarized the principal segments of the gas market as follows:

(1) Cooking.—The modern gas range is a remarkable achievement. It is more efficient, excels and outperforms any of its competitors. Public acceptance has been immediate and enthusiastic. The modern gas range has placed gas in a preeminent position in household economy. During the year 1938 over one million new gas ranges were sold.

(2) Water Heating.—This field offers one of the greatest opportunities for the expansion of a highly desirable load. Lower

THE gas industry today faces the future in a sounder and stronger position than at any time during the past decade, Percy S. Young declared in an address on "Investment Attributes of Gas Utility Securities," presented May 15 in San Francisco at the Executive Conference

initial costs and substantial improvement in efficiencies have met customer requirements and public acceptance has followed. Sales of 740,000 water heaters in 1938 exceeded previous years' sales while the sales of many non-gas using major home appliances showed marked decreases.

(3) Refrigeration.—Gas refrigerators continued their extraordinary public acceptance and relative sales results were better than other types of automatic refrigerators during 1938.

(4) House Heating.—Faced with keen competition gas house heating has made outstanding gains. Manufactured gas sales for residential house heating increased every year throughout the depression, and in 1938 were almost four times the 1929 sales. Gas house heating entrenches the three other services of cooking, water heating, and refrigeration.

(5) Air Conditioning.—The market for air conditioning is rapidly growing. Air conditioning equipment can be used to good advantage wherever people live, work, or play. The application of gas-operated absorption type direct dehumidification equipment as applied to the air conditioning field is making excellent progress. Air conditioning has been termed the nation's next great business. It carries a great opportunity for the gas industry.

(6) Commercial and Industrial Use.—The future of commercial and industrial gas sales is decidedly bright. The steadily increasing demand and acceptance of gas in this field over the past nine years, when, despite adverse business conditions, sales increased almost 30 per cent, indicates the commanding position attained by the industry.

A Banker Analyzes . . . Natural Gas Industry Investment Values



Frank R. Denton

the banking and investment community toward the industry.

High Credit Standing

Today your industry can borrow money at less cost than at any time in its history. In 1929 fifteen-year United States Government Bonds were selling to yield 3.4% while today fifteen-year Government Bonds yield 2.2%. This reduction of 1.2% presumably reflects the change in money rates for Government obligations are relatively risk free. During this same period the yield on bonds of some natural gas companies has been reduced twice as much as the yield on Government issues. In fact the yield on some of your industry's bonds is very comparable to that for Government issues if the tax free feature of Government bonds is considered.

The obligations of natural gas companies are today held in large blocks by insurance companies and other large investors in contrast to their small investment in the securities of your industry a few years ago. This record gives evidence of the improvement in the general credit rating of natural gas obligations. In order to understand these changes, it may be well to review the history of the industry as it appears to a banker.

The history of the natural gas business early in this century is primarily

DURING the past twenty years, the development and growth in the use of natural gas has been enormous and with its increase of importance has come a material change in the attitude of

• In the past five years the natural gas industry has reached the highest credit standing in its history. Today, it can borrow money at less cost than ever before. Since 1929, Mr. Denton points out in the accompanying article, the yield on bonds of some natural gas companies has been reduced twice as much as the yield on Government issues.

• These facts reflect a significant change in the attitude of bankers and investors toward the natural gas industry. What are the reasons for this change? Mr. Denton, a national banking authority, gives four principal factors together with a word of caution against over-expansion.

By FRANK R. DENTON

President, Mellon Securities Corp.,
Pittsburgh, Pa.

the development of larger gathering systems reaching more distant markets through larger and longer transmission lines. The story of the success of that development from a banking, investment and credit viewpoint can be traced directly to the linking of widespread reserves including connections between companies, thus insuring dependability of supply for a known period of time.

In the early 1920s, two things occurred which marked another era in the natural gas business, and which taken together greatly increased its national importance. The first of these was the discovery of vast new supplies of gas in the South and Southwest. Many of these important discoveries were made in the search for oil by our friends in the petroleum industry who from the beginning have been closely associated with your business. The second was the development of greater economy in long distance transmission of gas through better

trenching and pipe-laying methods, and material advances in the art of pipe manufacture. Your industry has been fortunate in having the cooperation of steel manufacturers, with their extensive research facilities and aggressive management, for they have provided you with the facilities for gas transportation which have made the recent expansion possible.

Even with large known reserves and practical methods of transmission, the industry was not yet especially popular with investors because it was still considered somewhat speculative and money for the new long distance pipe lines was mostly obtained through the credit backing of parent utility and oil companies. Many of the great new long distance pipe lines reached completion during the worst of the Depression and some met with considerable financial difficulties. In spite of all the difficulties, either financial or those connected with warm winters or poor business conditions, markets have been obtained, the industry has established itself and in the past five years has reached the highest credit standing in its history.

Such is perhaps the conception of the average banker or investor of the development of the natural gas business to the position it occupies today.

Confidence in Natural Gas

We may ask ourselves what are the principal reasons for the present high credit position of the natural gas industry and what it is that makes the banker and bond buyer so willing to advance funds to this industry. I believe the answer is that in the first place the banker, the bond buyer and the consumer are thoroughly convinced of the value of natural gas as a fuel. In the second place they are convinced that adequate gas reserves exist and are available to the companies in which they are interested and they realize that long distance transmission of gas from

Part of address before annual convention, Natural Gas Section, American Gas Association, Tulsa, Okla., May 9-11, 1939.

these reserves to the large markets is practical. In the third place the industry has been realistic in its attitude with respect to methods of financing, and finally the industry has had competent management.

I am sure that I was not invited here to preach a sermon, but it is a good opportunity to say one or two things that mean much to the banker, and I believe also to the industry.

First, past success should not mean the abandonment of sound standards of financing. Some 30% of this country's railroad mileage has gone into receivership, perhaps in part because debt was regarded more or less as a permanent fixture and not as something to be paid over a reasonable period of time. The natural gas industry should profit by the experience of other industries and be willing to devote a reasonable portion of its earnings to the retirement of debt.

The other thing that I wish to mention is expansion. No one is more desirous of adequate development of a natural resource than a banker. On the other hand, speaking only as a layman who doesn't have a fraction of the knowledge of you gentlemen as to

where gas can be found, I doubt whether the Almighty made gas reserves inexhaustible, and I wish to leave with you my hope that the enthusiasm of the industry for rapid development of its markets will not outrun the development of known reserves and that new pipe lines will not be built beyond the capacity of the known and securely available supplies of gas, for the sake of the investor, the consumer and the banker, about whom I was invited to talk.

In conclusion, it is my opinion that the natural gas industry has a most promising outlook. There is every reason to believe that with the continuation of its capable management, it will be a source of satisfactory profit to its stockholders and a leading utility in the communities which it serves, for many years to come.

Name Change

EFFECTIVE April 28, 1939, the name of the Roanoke Gas Light Company, Roanoke, Virginia, was changed to Roanoke Gas Company. This company is one of the supervised companies of the Stone & Webster Service Corporation.

John F. Weedon Is Dead



John F. Weedon

IN 1933 John F. Weedon retired as advertising manager of The Peoples Gas Light and Coke Company of Chicago, after 44 years of service. He died in his home, in Wilmette, Illinois, on June 5, following an illness of a few weeks.

Mr. Weedon was born in Mayfair, near the west end of London, England, almost 71 years ago, and was educated in the famous old school known as Christ's Hospital. He came to New York in 1886 when a young man, and held various positions, including newspaper work, before joining the Peoples Gas organization. His first job with the company was as a laborer in one of the gas plants; later he did clerical work, became an accountant, and in 1920 became advertising manager of the company, a position he held up to the time of his retirement.

On May 8, 1913, Mr. Weedon started the employees' magazine, *The Peoples Gas Club News*, and became its first editor. He pioneered in numerous employee activities of a social and recreational nature. In October, 1919, he originated the *Peoples Gas Gazette*, a publication mailed with gas bills to customers, which has been the model for many similar company house organs throughout the country.

For many years he was active in publicity and advertising work with the American Gas Association, the Public Utilities Advertising Association, and others. He contributed many articles to trade journals and advertising publications. His chief hobbies were literature and the theatre.

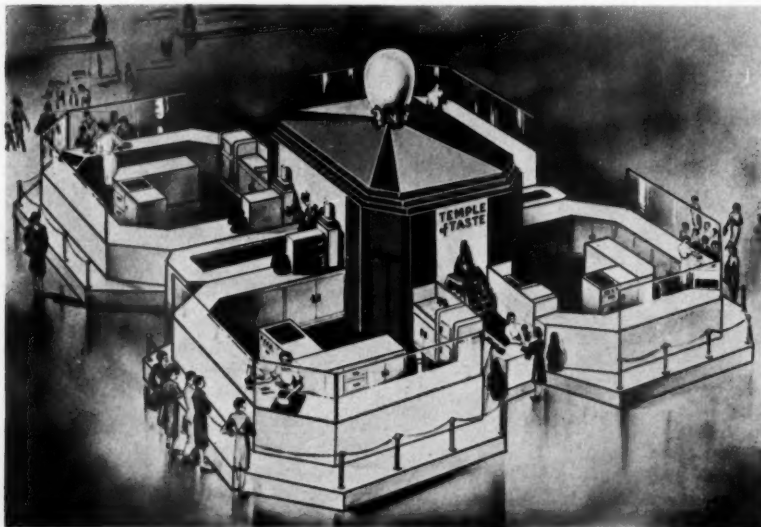
Liquefied Gas Monthly Published by "Gas"

THE first issue of *Butane-Propane News*, a new monthly magazine directed to the liquefied petroleum gas industry and published by Western Business Papers, Inc., publishers of *Gas*, made its appearance June 1, when more than 2500 copies of the 100-page digest-size book were distributed.

Butane-Propane News will deal with all branches of the liquefied petroleum gas industry. The first issue contains an article on Appliance Testing by W. R. Teller, research engineer of the American Gas Association Testing Laboratories, Cleveland.

Subscription rates are \$2.50 for three years, with no one-year rate; the foreign subscription rate is \$3.00 per year. Address of the publication is 810 South Spring St., Los Angeles, Calif.

Transparent Kitchen to Use Gas



The transparent kitchen, sketched above, will be one of the features of the World's Poultry Congress which will be held July 28-August 7 in Cleveland, Ohio. It is really four kitchens in which will be demonstrated each day poultry and egg recipes assembled from around the world—and gas ranges supplied by The East Ohio Gas Company will play a prominent part in the demonstrations.

The Fifth Big Job . . . Air-Conditioning

A Challenging Opportunity



Charles R. Bellamy

A FEW years ago a great many people, including numerous industrial leaders, were expecting a new industry called summer air-conditioning to lead us right out of the depression.

But it has not done so, and probably will not, because air-conditioning costs real money. In return it offers more comfortable and healthful living conditions, thereby raising the standard of living, but, as we all know, living standards are closely related to income, and when incomes are low, improvements of this nature are regarded as luxuries.

Gas Position Improves

Instead of a phenomenal growth it has had a steady growth, from a gross business of \$10,000,000 in 1931 to an annual business variously estimated from \$65,000,000 to \$90,000,000. In 1938 when general business declined more than 20% and plumbing and heating dropped 16% from the year before air-conditioning decreased only 11%. This is significant of the industry's position today, and it is indeed fortunate from our standpoint that the growth of air-conditioning has been rather slow but sure, because every year has seen a marked improvement in the competitive position of gas equipment.

In speaking of the summer air-conditioning market it is advisable to distinguish between the actual present market and the potential market. The size of the first is based upon present cost of air-conditioning and present business conditions, while the second

By CHARLES R. BELLAMY
Columbia Gas & Electric Corp., New York, N. Y. Chairman, Industrial and Commercial Air-Conditioning Committee

is dependent upon lower costs and improved business conditions.

An Analysis of the Market

First let us frankly survey the present market. Undoubtedly the most promising and largest outlet at this time is in the commercial field. The thousands of installations in department stores, restaurants, theaters, and other commercial establishments have yielded such good returns to their investors that competitors must either fall in line or lose out entirely. For this reason every store, shop, theater, hotel, hospital, school and church is at the present time a potential customer. Less than 25% of the large department stores now have air-conditioning, and only about 10% of the larger restaurants. There are therefore over 3,000 department stores that are excellent prospects, and close to 19,000 restaurants. In addition to this there are thousands of shops, theaters and hotels which, sooner or later, must install summer air-conditioning.

The second best outlet at this writing is probably the industrial field. Here the possibilities of summer air-conditioning are just beginning to be appreciated. True, industrial air-conditioning is relatively old, but generally speaking these older installations were in factories and plants where control of temperature and humidity were obviously imperative. Now, however, the benefits of such control are being demonstrated in all kinds of industries, and the success of these new applications indicates a universal need of air-conditioning by industry.

At the present moment the actual

available domestic market is probably only a fraction of the potential market. As the public becomes air-condition conscious, that is, acquainted not only with the comfort but also with the actual benefits of temperature and humidity control, and as general business picks up and equipment costs are lowered, the size of this market will expand. In this connection it is well to remember that every commercial and industrial installation has an educational value, and it is altogether possible that the popular demand for home air-conditioning will be accelerated by the completely air-conditioned automobile that is ready for marketing.

Large Business Predicted

Altogether the existing market for summer air-conditioning is large, and with the equipment costs reduced and operating performance improved this industry should soon do a gross business of over \$100,000,000 per year. One large chemical company recently completed a survey of the air-conditioning market and reached the conclusion that this business should for some time continue to double every three years. One writer estimates a yearly gross of \$350,000,000 sometime within the next ten years.

Just what percentage of this total business will go to gas it is impossible to say, but it should be a substantial amount. On the assumption that air-conditioning with gas will cost about \$300 per ton of refrigeration effect, an annual gross business by gas equipment manufacturers of \$100,000,000 would mean roughly 333,000 tons of new installation. Thus annual sales might readily develop a yearly gas load of approximately 9,300,000 M cu.ft. This should mean something like \$5,000,000 of new business to the gas industry per year. In fact, one of our leading utilities, after a most thorough

Abstract of paper presented at annual convention, Natural Gas Section, American Gas Association, Tulsa, Okla., May 8-11, 1939.

study, has set 10,000,000 M cu.ft. of gas as the annual new possible business of summer air-conditioning in this country.

Ourusoff,* in his comprehensive analysis of the residential market, found that this business alone might add around \$2,260,000 of gross revenue per year for many years. Figure out what the cumulative effect of such additions would mean to our industry, and remember that every foot of such a load is off-peak business. Certainly, here is an opportunity worthy of the best efforts of our industry! It is indeed the ideal business for us.

In the light of past performance the figures which I have just given may appear optimistic, but ten years from now they may show up as a very conservative under-estimation. In any event, a large new market for fuel is opening up, and if the gas industry is to secure any appreciable portion of this market it must have confidence in its own product. Certainly vision, optimism and confidence are needed to plan our campaign; for faint heart never won fair lady.

New Capital Needed

Certain manufacturers have already spent large sums of money in developing processes and equipment; now new capital is needed to develop markets. Here is where the gas utility can step in and help. Gas air-conditioning equipment does not sell itself. It has to be sold. And I think our experience with house heating and refrigeration proves conclusively that successful merchandising of gas equipment requires the wholehearted backing of the local gas utility.

To put gas air-conditioning across, gas companies are going to have to participate with the manufacturers in a campaign of intelligent advertising and sound salesmanship. All this will cost money, but it should be money well spent for the summer air-conditioning load is the perfect supplement to our house heating business. At any given price for gas the air-conditioning load is far more attractive to the gas company than an equivalent volume of house heating business.

In the realm of general scientific research on the value of air-condition-

ing regardless of how achieved, recent developments have been most favorable to the cause of gas. As you all know, gas equipment lends itself peculiarly well to the control of humidity. In this connection the work of the American Society of Heating and Ventilating Engineers during the past summer on the physiological reactions of men while carrying on light work in atmospheric conditions including effective temperatures from 77° to 92° with relative humidities of 60%, 75% and 90% is very encouraging. Similar tests, using somewhat dryer air, would appear to be desirable, and it seems to me that the American Gas Association should encourage work of this nature.

Tools Available Today

Now, let us examine carefully the air-conditioning tools that are available to the gas industry today:

Tool No. 1—*The Gas Engine*. Here is a tool especially suitable in certain locations for large commercial and industrial installations. The possibilities of expanding its field of application appear to be good.

Tool No. 2—*The Dehumidifier*. There are at least three well-designed gas-operated dehumidifiers on the market. Here is a tool that has been greatly improved during the past year and its cost reduced anywhere from 30% to 50%. Already favorably known in the air-conditioning business for its high-class performance, the dehumidifier, now more efficient and lower in cost than ever before, should have a correspondingly broader market. The modern dehumidifier with its cooling system can be used in many sections of our country to provide complete air-conditioning service of the highest order. Wherever refrigeration is imperative the low cost of the new models widens the market for split air-conditioning systems.

Tool No. 3—*The Absorption Refrigeration Machine*. There is one well designed machine now on the market and one or two others are expected to be put on commercial production some time this year. Here is a brand new tool, one that can do everything that the conventional electric unit does and more too, for here is the first machine to provide year-round air-conditioning.

Examine this array of tools critically and you will find that it constitutes a

matched set of fine instruments. Each instrument has its own peculiar advantages and is unexcelled in certain fields of application. Collectively, these tools cover practically all requirements of air-conditioning, so that wherever natural gas is sold gas-operated air-conditioning equipment should forge to the front. There is high-grade, economical equipment for big installations, little installations, and for the most exacting specifications.

Let us not lose sight, however, of this one very important fact:—that while gas equipment is being perfected the manufacturers of electrical equipment are not standing still. Progress is being made on all fronts. Competition is extremely keen, and for some time gas is going to have to work very hard for every bit of air-conditioning business that it gets.

Practically all the equipment that the gas industry has been waiting for is now available and on the market. Since this is so, I believe that you will all agree that the time has come for the gas industry, especially those companies serving natural gas, to take an active part in the development of the air-conditioning business. A few companies already have crossed this Rubicon; but as yet there has been no united action.

Gas Company Program

Some companies are asking what should be done. Undoubtedly one of the first steps should be to air-condition gas company offices, as has been recommended by several of the A. G. A. committees. By so doing you not only make your customers comfortable, but give a practical demonstration of the value of true air-conditioning. I am glad to say that several of our progressive gas companies have already taken this step.

Another step that I believe all the larger companies should take is to establish an Air-Conditioning Department headed by a trained engineer. Regardless of the company's policies on appliance sales, this proposed department is needed to advise prospective buyers of air-conditioning systems and to see that gas equipment receives fair treatment in the various set-ups as submitted by local architects and contractors.

Possibly the greatest handicap that

* 1938 Report of Industrial and Commercial Air Conditioning Committee, Industrial Gas Section, American Gas Association.

gas equipment has to face today is its lack of publicity and merchandising outlets. Local architects and contracting firms are, of course, much more familiar with conventional electric systems than with the newer gas units and need to be brought up to date and kept informed about the advantages of air-conditioning with gas. Here is one place where the gas company representative can do much pioneer and constructive work. In addition, I think that gas companies should make sizeable appropriations for advertising gas-operated air-conditioning equipment, so that as public interest in air-conditioning is aroused there will be general recognition of the fact that gas is just as efficient for summer cooling as for winter heating.

Competitive Factors

If you should ask me when is the big market for air-conditioning going to open up, I should have to answer frankly that I don't know. In so far as the gas industry is concerned, it is my opinion that there are three main factors to be considered in any attempt to answer this question. The first is, Competitive Position of Available Equipment. Efficient, low cost and economical equipment is a prime requisite for new business. Since the above descriptive terms are used in their relative sense, we can say that factor No. 1 is at the present time favorable to a rapidly expanding business.

Factor No. 2 is concerned with merchandising methods and sales policy. Obviously, equipment manufacturers need the full co-operation of the gas industry. The need for an intensive and progressive sales campaign by gas companies and equipment manufacturers is urgent. The answer to factor No. 2 is largely in our own hands.

Factor No. 3 is concerned with the improvement in business conditions, which we are all hoping for. The new industry, air-conditioning, cannot by itself perform the impossible and correct all our economic ills, but by giving employment and by establishing higher living standards it can help business. Improved business will in turn stimulate the use of air-conditioning, and then, when good times return, if we have done our part, the summer demands for gas should grow by leaps and bounds.

Plumber-Utility Cooperative Sales in Connecticut Drop in 1938

Exactly a year ago, in the July-August issue of the MONTHLY, A. B. Dibble, secretary of the Master Plumbers' Association of Connecticut, reported on the growth of plumber-utility cooperation in that state. In addition to describing the merchandising principles of the Connecticut Plan, Mr. Dibble's article showed the growth in appliance sales by plumbers cooperating with utilities from 1932 to 1937. To bring the picture up-to-date, the following report by Donald R. Schively, secretary of the Connecticut Utilities Merchandising Committee, giving the 1938 figures, is published.

GAS appliances and electric water heaters to the amount of \$268,111.21 were sold or rented, during 1938, by the master plumber and heating contractor trade of Connecticut, in cooperation with the nine larger gas and electric companies of Connecticut.

The above total is comprised of:

- (1) \$246,511.21 representing gas appliances which were sold.
- (2) \$21,600 of electric water heaters which were sold or rented.

This total of \$268,111.21 for 1938, compares with \$444,246 for 1937. The decrease is 39%.

In consequence of these activities, 2330 major gas appliances and electric water

heaters were installed in 1938. They embrace the following:

- 511 Gas Ranges.
- 430 Gas Refrigerators.
- 1123 Gas Water Heaters.
- 125 Electric Water Heaters.
- 81 Gas House-Heating Units.
- 60 Gas Kitchen Heaters, Range Conversion Burners, etc.

The 2330 unit sales for 1938 compares with 3424 total units sold in 1937. The decrease is 32%. All appliances showed a sales decrease in 1938. The appliance showing the least decrease was the gas water heater.

Commissions to the amount of \$48,881.48 were earned by master plumbers and heating contractors in connection with these transactions. Checks totaling this amount were issued to them by the nine companies and their affiliated subsidiaries. This sum was received by 658 plumbing and heating contractor firms. In addition, they received a total of \$84,226.28 for installing the appliances they sold, and some appliances sold by the companies themselves. Thus, the 658 firms received \$133,107.76 for sales and installation services which they rendered.

This total of \$133,107.76 earned by plumbing and heating contractors for sales and installation services in 1938, compares with \$193,225.60 received in 1937. The decrease is 36%.

GROWTH IN YEARS

Years	Sales	Plumbing Firms Participating
1932	\$ 68,000.00	85
1933	173,466.91	220
1934	231,290.26	349
1935	348,847.00	529
1936	386,408.00	631
1937	444,246.00	766
1938	268,111.21	658

SALES BY UNITS

	1933	1934	1935	1936	1937	1938
Gas Ranges	611	485	490	492	658	511
Gas Refrigerators	154	388	609	803	993	430
Gas Hot Water Heaters	434	466	769	1155	1252	1123
Electric Water Heaters		153	176	150	204	125
Gas House-Heating Units					105	81
Miscellaneous Gas Appliances	13	77	133	112	212	60
Total Units	1212	1569	2177	2712	3424	2330

COMMISSIONS AND INSTALLATION AMOUNTS EARNED BY PLUMBING FIRMS

Years	Commissions	Installations	Years
1933	\$38,196.79	\$ 10,500.00	\$ 48,696.79
1934	49,274.53	19,529.00	68,803.53
1935	75,340.14	26,019.00	101,359.14
1936	76,130.71	32,572.00	108,702.71
1937	84,185.45	109,040.15	193,225.60
1938	48,881.48	84,226.28	133,107.76



Walter C. Beckjord

To Members of the American Gas Association:

IN compliance with Section 2 of Article II of the by-laws of the American Gas Association, announcement is hereby made to the membership of the following report of the General Nominating Committee which will be presented to the annual convention in New York City in October, 1939:

For President—Walter C. Beckjord, Vice-President and General Manager, Columbia Gas and Electric Corporation, New York, N. Y.

For First Vice-President—T. J. Strickler, Vice-President and General Manager, Kansas City Gas Company, Kansas City, Mo.

For Second Vice-President—George F. Mitchell, President, The Peoples Gas Light and Coke Company, Chicago, Ill.

For Treasurer—Ernest R. Acker, President, Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y.

For Directors—2-year terms:
Frank H. Adams, President, Surface Combustion Corp., Toledo, Ohio.
James B. Black, President, Pacific Gas and Electric Company, San Francisco, Calif.

Charles M. Cohn, Vice-President, Consolidated Gas, Electric Light and Power Corp. of Baltimore, Baltimore, Md.

H. L. Dickerson, Ebasco Services, Inc., New York, N. Y.

Lewis B. Eichengreen, Philadelphia Electric Co., Philadelphia, Pa.

C. E. Gallagher, President, The East Ohio Gas Co., Cleveland, Ohio.

N. Henry Gellert, President, National Public Utilities Corporation, Philadelphia, Pa.

R. H. Hargrove, Vice-President and General Manager, United Gas Pipe Line Company, Houston, Texas.

George S. Hawley, President, Bridgeport Gas Light Co., Bridgeport, Conn.

C. E. Paige, President, The Brooklyn Union Gas Co., Brooklyn, N. Y.



T. J. Strickler



George F. Mitchell



Ernest R. Acker

Louis Ruthenburg, President, Servel, Inc., Evansville, Ind.

Respectfully submitted,

N. C. McGOWEN,
Chairman

H. C. DAVIDSON
W. G. WOOLFOLK
HARRY L. MASSER
JOHN VAN NORDEN
R. J. RUTHERFORD

General Nominating Committee

The following have been nominated by section nominating committees to serve as section officers for the next Association year:

Accounting Section: For Chairman—F. B. Flahive, Columbia Gas and Electric Corporation, New York, N. Y. For Vice-Chairman—E. N. Keller, Philadelphia Electric Co., Philadelphia, Pa.

Commercial Section: For Chairman—Davis M. DeBard, Stone & Webster Service Corp., New York. For Vice-Chairman—R. J. Rutherford, Worcester Gas Light Co., Worcester, Mass.



F. B. Flahive



Davis M. DeBard



Franklin T. Rainey



E. R. Guyer



Elmer F. Schmidt



A. M. Beebe



Frank H. Adams



James B. Black



Charles M. Cohn



H. L. Dickerson



L. B. Eichengreen



C. E. Gallagher



N. Henry Gellert



R. H. Hargrove



George S. Hawley



C. E. Paige



Louis Rutenburg

Industrial Gas Section: For Chairman—Franklin T. Rainey, The Ohio Fuel Gas Co., Columbus, Ohio. For Vice-Chairman—H. Carl Wolf, President, Atlanta Gas Light Company, Atlanta, Ga.

Manufacturers Section: For Chairman—E. R. Guyer, Vice-President, Cribben & Sexton Co., Chicago, Ill.

Natural Gas Section: For Chairman—Elmer F. Schmidt, Vice-President, Lone Star Gas Company, Dallas, Texas. For Vice-Chairman—Harry D. Hancock, President, Gas Advisers, Inc., New York, N. Y.

Technical Section: For Chairman—A. M. Beebe, Rochester Gas and Electric Corp., Rochester, N. Y. For Vice-Chairman—D. P. Hartson, Equitable Gas Company, Pittsburgh, Pa.

Oregon Sales Up

ACCORDING to its annual report the Portland (Oregon) Gas and Coke Company customers in 1938 purchased some 11,000 gas appliances.

Three-fourths of these were sold by the 180 gas appliance dealers with whom the Company cooperates in its business development program. Included in these appliances were more than 4,000 modern gas ranges, 4,000 gas water heaters and more than 1,000 major house heating units.

Memorial to S. W. Meals

A MEMORIAL to Samuel W. Meals, paying tribute to the sterling qualities of this outstanding leader of the natural gas industry who died January 4, 1939, was authorized by the Executive Board of the American Gas Association, meeting in San Francisco, May 15. Prepared by a committee composed of Thomas R. Weymouth, J. D. Creveling and Harry D. Hancock, the memorial reads as follows:

"In recording the death of Samuel W. Meals, which occurred on January 4, 1939, it is fitting that we should say something of those qualities which made him an outstanding leader and a friend much loved and admired by all members of the gas industry.

"Mr. Meals was possessed of that admirable quality which the English critic and dramatist Charles Morgan speaks of as 'singleness of mind.' He began his work in life with the oil and gas industry and at his death was still a prominent part of that industry. From his youth he looked towards a far horizon and each day found him moving unswervingly towards that distant point.

"Because of his vision he saw beyond his own immediate work. He had the intelligence which sees the inability of men or organizations to work or advance alone and thus with wholehearted enthusiasm he gave his support to all association activities. He was president of the Natural Gas Association of America when it merged with the American Gas Association. He was a member of a great

many committees, associations and clubs and was respected and admired by every man with whom he worked but by none was he more beloved than by the members of the natural gas industry to whose interests he devoted so many years of energy and thought.

"In a sense he unconsciously expressed his whole philosophy in the closing paragraph of an address delivered before the Natural Gas Convention in 1929, when he said—

'Our industry is progressing. But there is still room for improvement in our method and practices. We must continue our research. . . . Ours is a responsibility for rendering to our customers and the nation at large, the very best service with this wonderful fuel—Natural Gas.'

"Here is his never failing desire to press on instead of standing contented on the already accomplished; here is his faith in the ability of his loved industry to grow beyond its own hopes; and here, above all else, is his feeling of responsibility in acting as steward of a great natural resource and his sincere wish to use it in serving the people of his country.

"Samuel Meals died in 1939 but the heartening paradox is that he is still very much alive. He lives in all phases of the industry in which he believed. His name stands out on the printed record and is engraven in the memories of those with whom he was associated. And, when the ink and paper of records and epitaphs will have become dust, his influence will still be indelibly written in the history of the gas industry."

The Fuel of Today Dominates The World of Tomorrow



Hugh Cuthrell

the World of Tomorrow a better and finer place for the American public. We also show how we will contribute to the more efficient operation of American business and industry.

Contribution of Gas

Today everything points to the gas industry continuing a forward advance in American economic life. We know that we are an industry which has successfully demonstrated its useful service over a long period of years, but which will in future years provide a greater contribution to Mr. and Mrs. Public in the home, to the business man in his commercial enterprise, to the industrial leader in his manufacturing plant. At the Fair we are showing how we aim to achieve that. In the World of Tomorrow we will successfully prove our achievement in line with the forward-looking philosophy associated with the idea of the World's Fair.

In the early stages of the World's Fair project leaders in the gas industry realized the exceptional opportunity afforded by this exposition. Strategic in location, vast in scope, the proposed World's Fair impelled these men to full realization that an impressive exhibit should be prepared for acquainting millions of persons with the true story of gas.

Supplementing this exhibit it was realized that an intelligently planned and carefully carried out sales program should be established in order that the

By HUGH CUTHRELL

President, Gas Exhibits, Inc.

many and varied uses of gas fuel could be demonstrated at the Fair.

Today it can be said that our industry has succeeded in both endeavors to an unprecedented degree. We have an attractive exhibit in an important sector of the Fair grounds. We have sold gas as it has never been sold in any previous exposition. As a result gas is truly dominating the World's Fair and is daily proving to the public, business and industrial leaders that our service is essential in the World of Tomorrow.

Golden Opportunity

Through the promotion and publicity which we have obtained our industry has a tremendous asset. That asset is good will plus satisfactory performance of our fuel for each and every purpose in which it has been utilized. As salesmen it is now up to us to realize the benefits of this asset. It is necessary for the continued success of our industry that we take advantage of this golden opportunity, that we realize the significance and extent of the preponderant use of gas fuel at the Fair, and that we use the prestige of this achievement to increase load in our respective territories by selling the satisfactory performance of gas at the World's Fair.

It would be a well-nigh impossible task for me to describe all the uses of gas fuel at the Fair. You undoubtedly have read about some of these as well as about the Gas Industries Exhibit in the various articles in the gas trade press. I will, however, try to sketch some of the uses of gas at the Fair and our united industry's participation. I will also suggest that you follow up these observations with a visit to the Fair where you can inspect our exhibit, see some of the installations and real-

ize how we are participating to an unprecedented degree in this greatest of international expositions. In this way you will be better equipped to carry on an intelligent program of selling gas service on the basis of satisfactory performance in the World of Tomorrow.

To assist you in obtaining a good general picture of gas at the World's Fair I offer you the following outline of ten distinct achievements:

1. Gas is used exclusively as the fuel for all space heating, water heating and cooking in every building built or operated by the World's Fair Corporation.
2. Every one of the permanent buildings which will remain after completion of the Fair will use gas for space heating, water heating and cooking. This permanent use of gas will serve to provide promotion for our efforts in these fields.
3. More than 90% of the private exhibitors are using gas for space heating, water heating and cooking.
4. Gas is being used for lighting streets in the entire Court of States area. In addition spectacular gas flares are being used for lighting in different sections of the World's Fair. These revolutionary developments in street lighting are indicative of the varied use of gas at the Fair.
5. Gas is being used for illuminating buildings at the exposition. Among these buildings are the World's Fair Business Systems Building and the Gas Exhibits Building.
6. Gas is being used for spectacular and dramatic exhibition purposes in the Fair's feature spectacle, the Lagoon of Nations.
7. Gas is being used for practically every industrial process requiring fuel in the exhibits of private corporations.
8. Throughout the restaurants and concessionaires' stands large volumes of gas are being used for cooking, water heating and refrigeration.
9. A total of more than 2,500 gas appliances have been installed at the Fair with more being added.
10. Gas appliances play an important part in the model houses in the Town of Tomorrow area.

These ten points add up to an impressive total. They indicate the dominant position of gas fuel at the World's Fair. They demonstrate the variety of uses to which gas fuel can be put. They have an advertising value and a good will value to our industry that is practically impossible to estimate but which would require the expenditure of large sums of money to duplicate through an advertising campaign. They mean that gas is making a more definitely favorable public impression upon a larger audience than it has ever done before. That impression will result in increased use of gas service throughout the nation if we make an intelligent and united effort to achieve such a desirable goal.

The position which gas has achieved at the World's Fair has resulted only from well-planned and executed effort. It has been attained despite the efforts of competitors. It has resulted from thorough demonstration of the superior service of gas—a service which is in tune with the ideals of the Fair to provide for the social and industrial betterment of mankind.

Gas in Permanent Buildings

Gas won the first major battle with competition when our fuel was selected for space heating, water heating and cooking in the imposing Administration Building. The significances of gas utilization in this building, back in August, 1937, rested on the fact that it provided an indication of the opinion of World's Fair Corporation officials as to the fuel that would adequately represent their ideas in the World of Tomorrow. This indication was fulfilled three months later when the World's Fair Corporation selected gas as the exclusive fuel for space heating, water heating, and cooking in all its buildings and in all buildings designed for permanency in the future Flushing Meadow Park.

With gas thus in the ascendancy every effort was made to follow through on the idea of making gas the dominant fuel at the Fair. Every building, from constructors' shanties to imposing exhibit structures, was regarded as a definite prospect for space heating. And we have heated practically every building in the exposition area. In fact the major part of the pre-

Fair gas load of The Brooklyn Union Gas Company resulted from space heating. That load was more than 148,000,000 cubic feet or 50% greater than was anticipated. This leads to the sound belief that gas sales during the six months of the Fair this year will surpass the estimate of 400,000,000 cubic feet.

All this heating will serve as a benefit to the gas industry. It has already served to develop for our industry valuable contacts with the leading architects and engineers in the country. To them the cleanliness, adaptability and flexibility of gas for heating has been a revelation. Thus

they form a body of the public which can be nationally influenced toward gas fuel usage.

Another major utilization of gas at the Fair has been for heating water in buildings and in restaurants. To get an idea of the potentialities of gas-fired water heating, let me tell you that 500,000 gallons of water are being heated daily at the Fair. This is mainly for cleansing and sterilizing dishes and glasses in the restaurants, sandwich bars and stands, but there is also a substantial amount used for ordinary water heating purposes.

There is a factor in this use of gas which demonstrates the superiority of

(Continued on page 262)

Convention Program To Feature New York World's Fair

THE twenty-first annual convention of the American Gas Association will be staged at the Hotel Pennsylvania, New York City, October 9-12. Realizing that the New York World's Fair, which is less than a fifteen-minute ride from the convention setting, is the super attraction this year, plans are being made with special attention to the Fair.

The convention program will be so arranged that all delegates will have ample opportunity to visit the Fair and get first-hand information on the dominant position of gas at this international exposition. To this end, the program now being shaped by the General Convention Program Committee headed by George F. Mitchell, President, The Peoples Gas Light and Coke Co., Chicago, will be shorter than usual. An effort is being made to keep the number of meetings at a minimum, consistent with the major purposes of the convention. However, none of the vital, fundamental problems facing the industry will be neglected.

Authoritative speakers, who are nationally recognized in their fields, will speak at the general and sectional meetings. Details of the program will be announced in the September issue of the "A.G.A. Monthly."

The management of the New York World's Fair has designated Monday, October 9, the opening day of the convention, as Gas Industry Day at the Fair.

It is contemplated that certain convention functions will center at the Gas Industries Building. Here

the Court of Flames Theatre, the exhibit section showing products of 21 manufacturers, the Court of Flames Club, and other features, will offer much of interest to visitors. The spectacular 90-foot pylons, with luminous gas flames, at the Court of Flame are an awe-inspiring sight. At Homewood, the all-gas model home built by Gas Exhibits, Inc. in cooperation with Good Housekeeping magazine, visitors may view the latest gas appliances at work.

With the great variety of applications of gas fuel operating under unique conditions, as described in the accompanying article by Mr. Cuthrell, the Fair itself should prove an inspiration to those privileged to see it. There is no question but that gas has scored a remarkable victory over competitive fuels at the Fair and this fact offers a real opportunity for local promotion. Gas men can do a better job of promotion if they attend the convention and see the evidence at first-hand.

Since New York is now the Mecca of conventions, hotel reservations should be made at the earliest possible moment. Only by doing this can satisfactory facilities be assured.

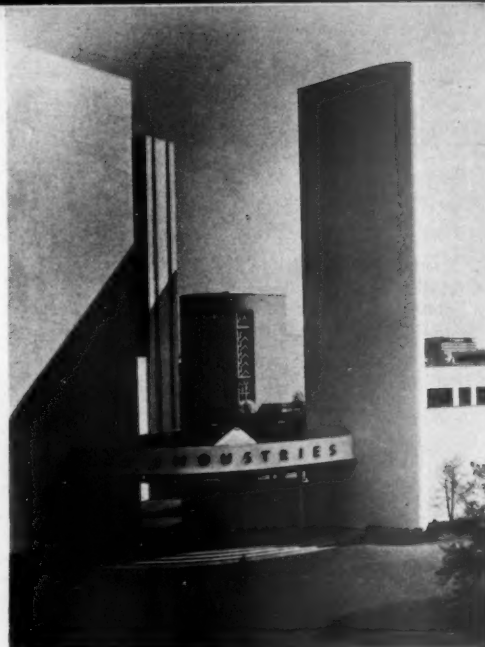
The program committee, in addition to the chairman, Mr. Mitchell, includes the following members: E. R. Acker, Walter C. Beckjord, E. J. Boothby, Floyd C. Brown, C. M. Cohn, Merrill N. Davis, C. E. Gallagher, George S. Hawley, Conrad N. Lauer, N. C. McGowen, Clifford E. Paige, Frank H. Payne, Herman Russell, Otto Snyder, and Kurwin R. Boyes.



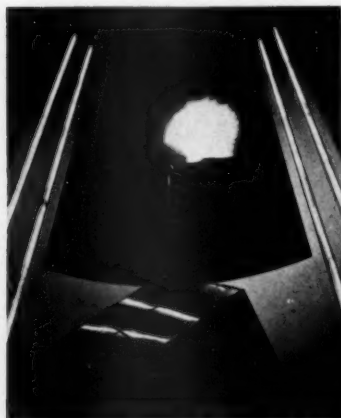
Homewood, The All-Gas Good Housekeeping Home, where gas provides carefree, automatic service



One of the main entrances to the Gas Industries Building at the New York World's Fair. Note the Court of Flames Restaurant on the left and animated outline of gas distribution system at the Fair in the center



Main entrance to the Court of Flame



Night view of 90-foot illuminated pylons, cube and huge gas flame which feature the Court of Flame



George Rector, official gas industry host at the Fair, shown with three of his attractive assistants

The Court of Flames Club where gas industry members may relax after enjoying the wonders of the Fair

Mme. Marita Farell, star of the Metropolitan Opera Co., admires the puppet opera, a feature attraction in the Gas Industries Building





"City of Light," world's largest diorama, exhibiting gas, electric and steam service of the Consolidated Edison Co. of New York, Inc. at the Fair



The Glass Tower of the Glass Center. This spectacular exhibit uses gas for all heating operations



Night scene of Constitution Mall at the Fair. The statue of George Washington looks toward the Theme Center of the World of Tomorrow

Gas represents fire in this feature spectacle of water, lights, flame and sound in the Lagoon of Nations



Hit show of the Amusement Area is Billy Rose's Aquacade, the finale of which is shown here. Gas heats the water in this large pool to the exact temperature necessary for the comfort of the huge cast



our fuel and equipment in supplying hot water of the proper temperature in sufficient quantity whenever desired. That factor is the rigidly enforced regulation at the Fair grounds which calls for 180° water in all restaurants for cleansing and sterilizing dishes and glasses. Added to this is the situation at the Fair where hot water is required in volume in restaurants and food stands practically from lunch time to after dinner instead of the usual restaurant condition where there is a lull between the lunch and dinner peaks when the hot water can be built up. The situation at the Fair results from the steady stream of customers to restaurants, visitors eating when they feel like doing so and when they think they have time.

Severe Conditions Met

This situation puts a strain on the equipment and fuel which heats the water. Yet the severe conditions at the Fair are met because of the flexibility of gas fuel. This has been demonstrated a number of times. Even when the demand in one building becomes so great that water runs out, additional gas equipment is conveniently installed the next day. The speed with which this can be done and the scarcity of large space in the restaurants have contributed to making gas universally used for water heating at the Fair.

The exclusive use of gas for heating water in restaurants and food stands, the dependability of gas service, the ability of gas fuel and equipment to supply and maintain 180° water, the increasing satisfaction of industrial engineers, architects and restaurant men with gas heated water are among the advantages resulting to our industry at the Fair. These advantages will be reflected in communities where those who have been connected with the World's Fair participants have their businesses. They will be satisfied with gas water heating service, thus providing an opportunity for additional gas load in commercial and industrial plants.

Before the start of the Fair we had reason to believe that gas would be the fuel for cooking. This belief was based on the satisfactory manner in which gas fuel has served hotels and restaurants for many years. At the

Fair our belief has been more than vindicated because gas thoroughly and completely demonstrates its definite superiority over competitors. Go through the restaurants out there and see for yourself that gas is the essential fuel in the restaurant of today and tomorrow.

This overwhelming choice of gas is a concrete thing. It is an asset we can use with our hotel and restaurant customers throughout the nation. It demonstrates the opinion held about gas fuel and gas service by the leading hotel and restaurant people in the country. It should supply a definite impetus to our efforts to promote increased gas load in the hotel and restaurant field.

To obtain a good idea of how a gas equipped restaurant operates I suggest an inspection of the Court of Flame restaurant in our exhibit building. There in an establishment operated by one of the leaders in its field—the National Hotel Corp.—you will see gas applied to every possible use except normal motorized equipment such as orange juicers, etc. It is one of the three places at the World's Fair where commercial gas refrigeration is used, the other two being the Standard Brands Exhibit and the Swedish Pavilion.

Added Prestige for Gas

From this brief presentation you can realize how gas predominates in the restaurant field as well as for space and water heating in the industrial field. This accomplishment can be made use of in your efforts to sell in the hotel and restaurant field. It also provides added prestige to gas in other fields because it indicates the high opinion of our service held by hotel and restaurant leaders. It is up to us to make full use of this advantage in a national and a local scale.

In addition to the practically exclusive use of gas for space heating, water heating and food preparation in the World of Tomorrow, nearly every industrial process at the World's Fair uses gas fuel. These processes are numerous and varied. The users represent a cross-section of American industry.

Perhaps the greatest gas-using industry in the Fair grounds is baking. The leading exhibitor in this field is

the Continental Baking Co., which has a complete operating bread and cake bakery in its building. A look there will show the essential position of gas fuel in the modern bakery which seeks to maintain baking perfection day after day. An inspection will show you how the automatic control, cleanliness, flexibility and efficiency of gas are responsible for its being the fuel used by modern bakeries today.

Gas Aids Exhibitors

Milk, like bread, is necessary in today's and tomorrow's world. The milk industry, through Borden's and the National Dairy Co., is represented very effectively at the Fair. In its demonstration of the care with which milk is made a safe, wholesome food gas fuel plays a prominent part. Gas-fired boilers supply the steam used for heating the milk in the pasteurizing process as well as taking care of the required sterilization. Gas also supplies the very essential hot water used in these exhibits.

Gas-fired steam boilers are used for a variety of other functions throughout the Fair grounds. Among other uses it is employed to supply steam for the bottle washing machine in the exhibit of Refreshments at the Fair and to supply steam necessary for several processes during the fabrication of automobile tires in the exhibit of the Firestone Tire and Rubber Company.

Spectacular is the main exhibit in

(Continued on page 287)

Open House at A.G.A. During Fair

All gas men visiting New York City this summer to see the World's Fair, or for any other purpose, are cordially invited to honor headquarters office of the American Gas Association with a visit. A special invitation has been issued by Alexander Forward, managing director, to meet the staff and a hearty welcome is assured. The full extent of headquarters facilities, such as telephone and stenographic service, will be available to visitors. If you plan a visit, make Association headquarters your mailing address. It is conveniently located in the Graybar Building, 420 Lexington Ave., next to the Grand Central Terminal.

America's Virile and Aggressive Gas Industry*

THE "greatest show on earth," the New York World's Fair of 1939, pictures The World of Tomorrow by displaying and portraying all that may be expected from the sciences and from the arts to improve the world in which we live. This great show comprises not only what is best and greatest in America; the flags of very many nations fly over the hundreds of acres devoted to instruction and entertainment, each flag indicating that the nation it represents is participating in the exposition.

The Crown of the Andes, priceless relic of the past; the fastest locomotive ever built, your Coronation Scot; practical, workable television; rotolactors, milking by machinery the cows of the model dairy farm—all these attractions vie with each other in competing for public interest and appeal.

Gas Heads Procession

Far out in front in this great procession of wonders is the gas industry with its beautiful building, with its striking exhibit of all that is latest and best in equipment, and with its own rendering of the general slogan: "The World of Tomorrow—Available Today." All connected with the gas industry will be thrilled with pride to see what the industry has done, not only in the exhibit itself, but in the widespread use of gas throughout the Fair grounds and buildings. This Fair is built on land which subsequently will be used for a public park. Certain of the buildings, therefore, have been built for permanent use. All buildings, whether permanent or temporary, which have to be heated, are heated by gas.

* Presented at annual general meeting of The Institution of Gas Engineers, London, June 6-9, 1939, in connection with the celebration of the Centenary of William Murdoch, Father of the Gas Industry.

By CLIFFORD E. PAIGE

*President, The Brooklyn Union Gas Company, Brooklyn, N. Y., and
Former President, American
Gas Association*

Historical

One responds instinctively to the suggestion of the great possibilities of the future. And yet the future would not be possible without the past. The Centenary of the death of William Murdoch brings strongly to mind the historical interest and background of our great industry. It is fitting that we pause and meditate on the past. It is not for us Americans to eulogize the man or his memory. You in your country will have done that adequately and admirably. Such an anniversary brings the thought of one hundred years; and since the name of Murdoch is so closely identified with the gas industry, this particular one hundred years takes on added significance.

One may say that Murdoch conceived gas as a public servant in 1792 or earlier, and yet it was still at the time of his death a puny child. Born humbly and of humble parentage, it did grow, and in time became what it now is, a mighty force in the land. For the gas industry is great. It renders a vital service to the community. It is a public necessity in peace or in war. It brings comfort and convenience to all those to whom it is available. There are those who say it languishes, who say it is "on the way out." It cannot die from senility; it is ageless. To those familiar with its development, its transitions and its ever widening sphere of usefulness, it is neither dead nor yet sleeping. It has been traduced by those who are forever turning to new gods and those who, dazzled by some romantic will-o'-the-wisp, find themselves blinded when their light source fails.

Ever since Murdoch lighted his torch, down through the years the gas industry has become a tradition. You and your countrymen have carried it forward. Your enterprise, your fortitude, and your spirit have been always an example and an inspiration to us in America, and in fact to all throughout the world.

While we may not forget the sentimental associations of our business, circumstance forces us to deal with the practical, realistic aspects of it today. In order the better to appreciate today's situation, we may trace briefly the early development of the gas industry in America:

1803—This was the year of the first recorded Gas Company in America. Main Street in Richmond, Virginia, was temporarily lighted by a large gas burner on a tall tower. The gas came from a nearby cellar gas plant.

1812—David Melville, of Newport, Rhode Island, lighted his house and the store in front of it with gas which he manufactured on his premises. Later in the same year, he also lighted a cotton mill at Watertown, Massachusetts.

1816—Baltimore, Maryland, became the first city in America to have a Gas Light Company.

1823—The New York State Legislature granted a Charter to the Gas Light Company of the City of New York and within a few weeks the Common Council of the City of New York granted permission to lay mains in the City streets. Materials and equipment were imported from England, and in March, 1825, when the work was completed, gas was introduced in New York City.

1850 to 1865—Strangely enough, in spite of the popularity of gas as an illuminating agent in those early days, even as late as 1850 there were only about 30 gas plants in this country. Economists of that time had difficulty in visualizing a bright future for the gas industry. They were wrong. It took time, however, to get started. It was not until 1865 that the use of gas for home lighting began to attain any great popularity.

It is a curious fact that natural gas in America ante-dates any history of

manufactured gas. There is mentioned in history a "burning spring" on a tract of land in West Virginia which was dedicated in 1775 by George Washington as a National Park. Probably this was natural gas. Also there is mentioned the production of natural gas from a salt well at Charleston, West Virginia, in 1815.

The first real use of natural gas appears to have been at Fredonia, New York, when a natural gas well 27 ft. deep was utilized in about 1821. Here again a long delay occurred before there was any significant commercial development. The first natural gas corporation in America was organized in Fredonia in 1858. In 1870, a wooden pipe line 25 miles long was completed to transmit gas to Rochester, New York, at a cost of about 1½ million dollars.

Development

For the last 75 years the development of both the manufactured and natural gas business in America has followed substantially the same lines as has been the case in other countries; that is to say, the greatest use of gas in the beginning was for domestic purposes, and the greatest domestic use was for lighting. Gas lighting in America gave way to electric lighting quite rapidly after 1900. In Great Britain a large part of the lighting business was retained for a much longer period and, in fact, what remains is still held very tenaciously and successfully.

It is interesting, if not surprising, to know that illuminating engineers in America are looking upon gas as a lighting medium with more favor today than they have for many years. Moreover, gas lighting effects may be found in many places in the New York World's Fair this year. For example, in connection with a very spectacular illumination of water fountains in the Lagoon of Nations, gas will be used for lighting, at the enormous rate of 400,000 cu.ft. in 30 minutes. The four pylons of the buildings of Gas Exhibits, Inc., carry lighting burners to their entire height of 90 ft. Modern Welsbach mantle lights are used around the grounds of the gas exhibit, and enormous flares are used both for building lighting and as flambeaux on certain of the

bridges which cross from one part of the Fair to another.

Strangely, too, the "gas for power" load was largely lost to the electric motor drive, especially in small power applications, nearly a generation ago. Natural gas has retained a considerable amount of power business. Today we find a re-awakening of interest in the possibilities of gas for power.

The gas industry of today is so complicated and so technical that it would take much more than the space available to cover it thoroughly. I have mentioned gas for lighting and gas for power.

Electrical Competition

Now I come to the greatest unified campaign ever embarked upon by the gas industry in America; a nation-wide effort to interest the consumers represented by 16 million gas meters in the country, through an advertising program supported by the contributions of almost all the manufactured and natural gas companies in the United States. The scope of this gigantic effort is expressed in the slogan which appears in all the advertising copy issued: "Gas for the Four Big Jobs—Cooking, Refrigeration, Water Heating and House Heating." None of these jobs, taken separately, is available to gas exclusively, and any business for gas has to be sold against the keenest competition. Electrical competition for years has been a threat to gas and in some communities has become a menace.

There are few places in the United States, however, where the gas business has had to suffer very much because of the invasion of electric ranges. There is a more insidious competition in electric cookery by reason of the widespread use of table appliances, such as toasters, percolators and chafing dishes.

Referring specifically to the gas range of today, it must be clear from our publications how the American gas industry has been inspired by the advent of what is called the "CP Range." This means certified performance. The industry did not need this range for competition with electricity, but anticipating any future possibility it meets in 22 outstanding details any competition which may be developed. This result has been possible by truly

remarkable cooperative research in which almost all the gas companies, as well as the manufacturers of gas ranges, participated.

Electrical competition is keen in the field of refrigeration. There are a number of types of electric refrigerator made, but only one domestic gas refrigerator is available in the United States. That gas refrigerator, however, has given a very good account of itself in the keenly competitive sales of all types of mechanical refrigeration. It is interesting that manufacturers of electric refrigerators are beset not only with competition by gas refrigerators but by each other's products as well.

The electricity companies have made great efforts to popularize water heating by electricity. I do not know of any which feel very proud of their results. Water heating and house heating have admittedly been hard to obtain, but competition in these fields comes principally from fuel oil. The use of fuel oil for these types of heating seems not to have been considered very seriously until comparatively recent times. But in a very few years the oil companies caught up with all the gas industry knew about combustion and burners, and in many cases went right on past them.

Gas for heating water or for heating homes, especially manufactured gas, can rarely claim a lower cost per B.t.u. than may be reasonably claimed for its competitors. But the collateral advantages in favor of the use of gas have been so great and have been so much appreciated by satisfied customers, that many companies are getting almost as much business from recommendations by the users as from their expenditure for space to display the printed word.

Research and Utilization

It would be sheer neglect if I failed at this point to call attention to the fact that the necessity for research in the gas industry is now recognized in America and that plans are in the making for accomplishment never before undertaken. Then, too, it must be mentioned that whatever high standards may be reached in the production of perfect appliances, the Testing Laboratories of the American Gas Association do a great work in keeping all approved appliances up to min-

imum standards adequate for economical and safe operation.

While the manufactured and natural gas interests have much in common, they have decidedly their individual characteristics. In a situation where natural gas is available it would be rare indeed to find that it would not be substantially cheaper per therm to supply such gas than any company could supply manufactured gas in the same territory.

Natural gas is transported literally thousands of miles in the United States and under hundreds of pounds of pressure. Very few people whose experience has been entirely in the manufactured gas field can have any conception of the magnitude and ramifications of the natural gas industry. Yet when it comes to domestic use and development, both natural and manufactured gas have practically the same problems. There is, of course, a substantial climatic difference between the northern and the southern part of the United States, and the tremendous fields of natural gas available are largely in the southern part of our country.

Air Conditioning Market

We are now on the threshold of a new development rounding rapidly, we believe, into a practical opportunity. I refer to air conditioning by gas. Equipment which I have seen recently convinces me that shortly there will be available for domestic use, as there has not been before, whether gas or electric, equipment which will provide not only any reasonable degree of de-humidification desired, but which also will be completely flexible as to temperature control within reasonable limits.

The effect of all these considerations is the most encouraging fact that our average consumption per domestic customer's meter now shows a definite increase. For industrial purposes, ever since the Great War our people have been active in technological study and development, with the result that today we deal in performance so precise and so exact as to reduce waste and loss to figures considered impossible of attainment even a few years ago. The same position obtains with regard to commercial equipment; restaurants

and hotels continue to use gas because their experience teaches them that gas is best. In order to give additional impetus to the efforts of our salesmen, we now have gas refrigeration available on a commercial scale.

Nevertheless we are a long way from the time when lighting was our business. I should in fairness detail more of the applications of gas to the individual domestic and industrial activities of today. To omit them is not to disparage them, but to acknowledge rather the limitations of time and space.

The Future

The gas industry in America is today unified as it has never been before, especially in its effort to render the best public service. Development is not confined, however, to the commercial side of our business. We have kept pace in the development of production, distribution or, speaking more comprehensively, our engineering side as well. The details of these accomplishments are already familiar to those who are interested in them. To review them here, which I am tempted to do, would be only to duplicate what I have said about the commercial side of the business.

We have been conscious throughout of the good example furnished by the gas industry in Great Britain. Where else could we have found the courage our people have shown in the last ten years, when, in common with almost

all other business, gas sales volume dwindled while tax burdens and other costs mounted? Our people did not lose their faith. Their confidence never even wavered, and if, as today's trends indicate, sales volume increases in spite of the burdens of high costs and keen competition, the judgment of our supporters will be vindicated and we may continue to make an important contribution to the public welfare.

Breaks Down Gain in Gas Sales

THE Public Service Electric and Gas Company, Newark, N. J., made an analysis of the gain of 3.2% in its residential gas sales in 1938 over those in 1937. By a process of successive elimination it was shown that the effect of the weather being negligible, approximately 42% of the total gain was caused by an increase in the number of customers, 20% by the increased use of gas for water heating and 20% by the increased use for refrigeration. The remaining 18% was attributed to an increase in cooking.

To confirm this conclusion figures were obtained from the A & P stores in the same area which showed an increase in sales of all departments—meat, groceries and vegetables.

"House and Garden" Lauds CP Gas Ranges

THE triple saving story of the CP gas ranges is told with telling effect in an attractive double-page feature article in the July issue of *House and Garden* magazine. "Gas Ranges Save Time, Save Fuel, Save Food" is the heading and theme of the article which lists the many advantages of CP ranges. Line sketches showing various parts of ranges and cooking operations are used to illustrate the article. Exterior views of five models of CP gas ranges are spread across the top of the two pages.

Mrs. Virginia Hart of *House & Garden*, who was formerly affiliated with the gas business, is the author of the article. She not only gives a detailed analysis of the superior features found in CP gas ranges but interprets these features in terms of personal benefit to the customer. In her own language, "A new gas range is as different from the one you bought ten years ago as this year's car is superior to the one you were driving back in 1929."

The Committee on National Advertising has made a special distribution of reprints of this article and is prepared to supply additional copies at 80¢ per 100 copies, F.O.B. New York. Orders should be addressed to the American Gas Association, 420 Lexington Ave., New York, N. Y.

Another Blue Seal



Unique approval seal of The National Gas Association of Australia which adorns appliances meeting specifications of that association. Like the seal of the A. G. A. Testing Laboratories, it has a blue background

The Water Heating Load ... Its Value and How It May Be Secured

PART II

WITH the given premise of an almost endless number of ways of securing the water heating load, we turn our thoughts and consideration to evolving a promotional program which will fit our own particular conditions. It should be borne in mind, however, that a program which might prove highly effective in one locality may prove to be a total loss in some other community and vice versa.

In reviewing the remarkable gains of the electric industry during the past decade, one of the salient and remarkable features is, undoubtedly, the factor of dramatization which has been so inseparably linked with their promotional programs. Now, electric service is intangible to the extent that a kilowatt-hour of energy is not readily visible or perceptible to the casual observer; but, what the kilowatt-hour will do in serving the needs and desires of mankind must be apparent to all of us.

Intangible Selling

Here we have, therefore, the case of intangible selling as has been exemplified in the electric industry and whether we, in the gas industry, like it or not, we will have to admit they have done a splendid job. Dramatization of electric energy with particular respect to the many chores it will do in the average household to lighten its routine burden is to a large extent the answer of the gains made by the electric industry and should give us some worth while ideas for a promotional program in the gas industry.

The promotional program which we are outlining herein is given from our own actual experience and in no sense of the word is offered as a panacea or cure-all. What success we may have achieved is best shown by Figure 1, the graph of the summer months' domestic load shown on Page 212 of the

- In the second and concluding part of his penetrating analysis of the gas water heating load, Mr. Howe presents a promotional program based on the successful experience of the Tucson company. The first part of his paper, in which he evaluated the water heating load, was published in the June issue starting on page 211.
- This water heating study won first prize of \$500 for Mr. Howe in a nationwide contest for utility company employees and is worthy of careful consideration by all gas companies. The contest was sponsored jointly by the American Gas Association and the Association of Gas Appliance and Equipment Manufacturers.

By WILLIAM H. HOWE

Commercial Manager, The Tucson Gas, Electric Light & Power Co., Tucson, Ariz.

June issue. Specifically, we find the summer usage has been increased from approximately 20 M cu.ft. per year in 1931 to more than 28 M cu.ft. per year in 1938 or about 40% increase.

At the time of the change-over to natural gas in 1934, and bearing in mind the fact that our domestic consumption was far below the national average, considerable thought was given to ways and means of building up this deficiency. It was evident that a large space heating increment could readily be attached in view of the fact that fuel oil was selling at 8¢ to 10¢ per gallon and soft coal at \$15.00 per ton. With a comparatively warm winter climate, averaging less than 2,000 degrees days per year, it was apparent that considerable promotion would be required to attach the intermediate load of water heating and, more specifically, the automatic water heater since this saturation was very low at that time. In other words, here was

the job of educating the consumer to the desirability, need and dependability of 24-hour automatic hot water service.

In evolving our promotional program for the drive on the automatic water heating load, it is obvious that there are many factors affecting the composite picture in securing the load. First of all, and of primary importance, is selling the value of 24-hour hot water service and creating a desire in the mind of the prospect for such service. Second, real selling effort on the part of the salesman is required to go out and sell. This we find is activated by the profit motive and requires, therefore, a return for his services not only commensurate with his efforts, but something in addition to retain his incentive to continue selling automatic water heaters.

With these two basic factors in mind, we considered the following procedure:

1. A co-ordinated and continuing advertising program to educate the prospect on the value and need for 24-hour hot water service. An occasional contest in the form of word puzzles with awards to the winners to retain general public interest.
2. Getting the dealer and salesman to advertise and talk automatic water heaters.
3. Financing purchases of water heaters on the easiest and simplest possible terms for the buyer.
4. Taking the old tank or side-arm heater off the hands of the purchaser and the dealer.
5. Good remuneration for the salesman on the firing line. He is the last link in the chain and if he fails, we too, will fail in our promotion.

With the foregoing factors in mind, we presented the following program of co-operation to the dealers and plumbers which was greeted with 100% acceptance.

1. The utility will continue its coordinated program of advertising automatic water heaters. Our advertising display department is available to each and every plumber and dealer to assist in laying out his own advertising at no charge.

2. The utility will pay the dealer an advertising allowance of \$2.00 for each automatic water heater sold provided the dealer or plumber will put \$1.00 with such sum. In other words, the utility will pay for up to two-thirds of the dealer's specific advertising.
3. The utility will finance the sales of automatic water heaters by the dealers at no charge or discount up to 24 months with 10% down payment and carrying charges on the unpaid balance at one-half of one per cent per month. Monthly instalments will be shown on purchaser's monthly bill for gas service.
4. An allowance of \$2.50 each will be made by the utility to the dealer for each tank or side-arm water heater taken in trade by the dealer in the sale of an automatic water heater when delivered at our warehouse.
5. The utility will pay the dealer \$1.00 for the city permit necessary in the installation of an automatic water heater.
6. The utility will pay the dealer's salesmen \$5.00 each as a bonus for the sale of automatic water heaters.

While the first five items of this promotional program were put into effect in the early part of 1934, at the time of the change-over to natural gas, it was not until the fall of 1936 that the payment of the \$5.00 bonus to dealer's salesmen was inaugurated. Referring to Figure 1 we find some increase in consumer consumption for 1935 over 1934, as might be expected. However, there is very little increase for 1936 over 1935 but after the bonus payments were put into effect, 1937 shows a healthy increase over 1936 which has been carried through into 1938. These data show a definite and decided increase of summer gas consumption after the inauguration of the salesmen's bonus. We are now more firmly convinced than ever that the salesman's bonus was the most effective promotion ever undertaken by this company.

In speaking before the Spring Sales Conference of the Pacific Coast Gas Association in April, 1937, this writer outlined the foregoing promotional plan to the group and the reaction of some of those present was that we might be "giving our shirt away." Now tabulating these costs, we find:

\$ 2.00—Dealer's Advertising Allowance
 2.50—Tank or Side-arm Trade-in
 1.00—City Installation Permit
 5.00—Salesman's Bonus

\$10.50—Total

In addition to the foregoing, this company made expenditures for advertising of water heating over its own

name to the extent of probably \$1,000 per year. During the five years of 1934 through 1938, it is apparent some 2,200 automatic water heaters were added to our lines of which only about 70% were actually reported by the dealers. The remaining 30% is largely accounted for as installed by building contractors who would not ordinarily report to a utility.

Assuming this company spent \$1,000 per year in advertising water heaters and paid the dealer \$10.50 each on 70% of the heaters actually installed, we find the approximate average cost of attaching this load as follows:

2,200 x \$10.50 x 70%	—\$16,170
5 Yrs. Adv. @ \$1,000	— 5,000
2,200 Water Htrs. @ \$9.62	—\$21,170

We have previously shown the capitalized incremental value of an automatic water heater at \$289 and it is obvious, therefore, that we were paying in the form of promotion about 3 1/3% of the capitalized value of the load or about 31.6% of the first year's net revenue.

It is axiomatic that the proof of the pudding lies in the eating and the most tangible proof we have that our efforts were not in vain is best shown by Figure 1. Here we have seen a growth in our summer load from 20 M cu.ft. per year to more than 28 M cu.ft. or more than 40%; in addition, there has been a decided increase in number of consumers from a low of 4,108 in the summer of 1933 to 6,275 in 1938, which amounts to nearly 53%. The composite picture, therefore, is that the total summer gas consumption has been increased nearly 106%.

There are other factors of value, tangible and otherwise, inhering to the automatic water heating load which are difficult of evaluation. One pertinent factor we have noted is that it not only builds good will, from the splendid service it renders day in and day out, but almost invariably a space heating installation will be sold with or immediately after the sale of the water heater.

Whether or not the water heating load, more particularly the automatic

TABLE 4—COMPARATIVE COSTS OF OPERATION OF AUTOMATIC WATER HEATERS

	Natural Gas @ 60¢ Per M cu.ft.	Elec.
	vs. Electricity @ 7 Mills Per K w.h.	
	Gas	
Storage Capacity-Gallons	20	40
Approx. Installed Cost	\$60	\$90
Approx. Heating Input	20,000 B.t.u.	3,750 Watts
Approx. Heating Efficiency	70%	100%
Effective Heat Input	14,000 B.t.u.	12,806 B.t.u.
Recovery-Gals./Hr. @ 60° F. Rise	28.0	25.6

ESTIMATED OPERATING COSTS PER MONTH
 (Based upon average of 2,065 cu.ft. per mo.)
 (1,135 B.t.u. per Cu.Ft.)

	Gas	Elec.
Amortization of Investment @ 1.93%*	\$1.16	\$1.74
Cost of Gas—2,065 M cu.ft. at 65¢	1.34	—
Cost of Elec.—480 K w.h. @ 7 mills	—	3.36
Total Cost of Operation	\$2.50	\$5.10

* 60 mo. life with interest @ 6% per annum

SUMMARY

RECOVERY: 9.4% Greater for average gas heater
 OPERATING COSTS: 104% higher for electric heater

CONCLUSIONS

Assuming that an electric water heater is 100% efficient in its heating cycle and that an automatic gas-fired water heater has an efficiency of only 70% in its heating cycle, it will require 205 K w.h. to replace each M cu.ft. of gas at 1,000 B.t.u. per cu.ft. Considering fuel and amortization of investment, electric energy must be available at 1.58 mills per K w.h. to show a lower operating cost than gas at 65¢ per M cu.ft.

water heater, is desirable from the standpoint of the utility, there can be little doubt. On the other hand, here is a neglected child which, if fed and clothed, might develop into a husky adult.

Electric Competition

In the Pacific Coast area, notably Los Angeles and Southern California, with the advent of Boulder Dam hydro-electric power being sold by the Bureau of Power & Light, municipal electric utility in the City of Los Angeles, electric energy for water heating is being made available at the almost unbelievably low figure of 7 mills per kilowatt-hour. To say the least, some inroads on the water heating load have been made and it is a matter of serious concern to the gas industry in Southern California.

In our several contacts with various members of the Pacific Coast Gas Association, we have discussed this matter at considerable length to gain some idea of their problem.

Now, there is nothing mysterious about the heating value of a kilowatt-

hour of electric energy; as a matter of fact, it has a heating value of 3,415 B.t.u. compared to a million B.t.u. for each M cu.ft. of natural gas having a gross heating value of 1,000 B.t.u. per cubic foot. Obviously, there are certain losses resultant to the combustion of natural gas and generally accepted data indicate a gas-fired automatic water heater may be expected to show 70% to 75% efficiency through its heating cycle.

Admittedly, the efficiency of an electric heating element is high, since there are no losses incident to combustion and we might assume, for the sake of comparison, that the heat transfer from an electric heating element is perfect and there are, therefore, no losses of any description. Based upon the foregoing premises, we find it will require 205 kilowatt-hours of electric energy to replace each M cu.ft. of 1,000 B.t.u. natural gas or 20.5 kilowatt-hours per therm in an automatic water heater.

Table 4 shows our analysis of the comparative economics of an automatic water heater using 1,135 B.t.u. natural gas at 65¢ per M cu.ft. and a similar electric water heater with electric en-

ergy available at 7 mills per kilowatt-hour.

In the Los Angeles area, we are advised that 40 gallon automatic storage electric water heaters are available at an average installed cost of \$90.00 with water piping and heavy duty electric wiring being furnished free to the customer. These electric water heaters have heating elements of 2,500 watts and 1,250 watts, respectively, or a total of 3,750 watts of capacity. The average gas-fired automatic water heater has a capacity of 20 gallons with a heating input of 20,000 B.t.u. per hour and sells for \$60.00 installed.

In making our study of the comparative economics involved, operating costs include not only the cost of the heat input, but amortization of the respective investments based upon a life of 60 months with interest at 6% per annum. In this connection, it should be noted that amortization is as much a part of the operating costs as any other element entering therein. Figuring amortization at 1.93% per month, based upon an estimated life of 60 months with interest at 6% per annum, we have a fixed charge of \$1.74 per month for the electric water heater and \$1.16 per month for the gas-fired water heater. This difference of \$0.58 per month in fixed charges accounts for the fact that electric energy could be given away at no cost to the consumer, and 1,100 B.t.u. gas could sell for 28¢ per M cu.ft. to show the same over-all cost of operation as an electric water heater in similar service.

Summarizing, briefly, this study indicates electric energy at 7 mills per kilowatt hour in an automatic storage water heater will cost more than twice as much as 1,135 B.t.u. natural gas at 65¢ per M cu.ft.

In Figure 4 we show a graph of equal operating costs of gas vs. electric water heaters with various costs for the respective services and various heating values of gas.

With an analysis of the comparative economics, it is obvious there is but one solution to the problem insofar as the gas industry is concerned. We are going to have to get out and toot our own horn, do a real selling job based upon cold facts and realities rather than mystery and glamour.

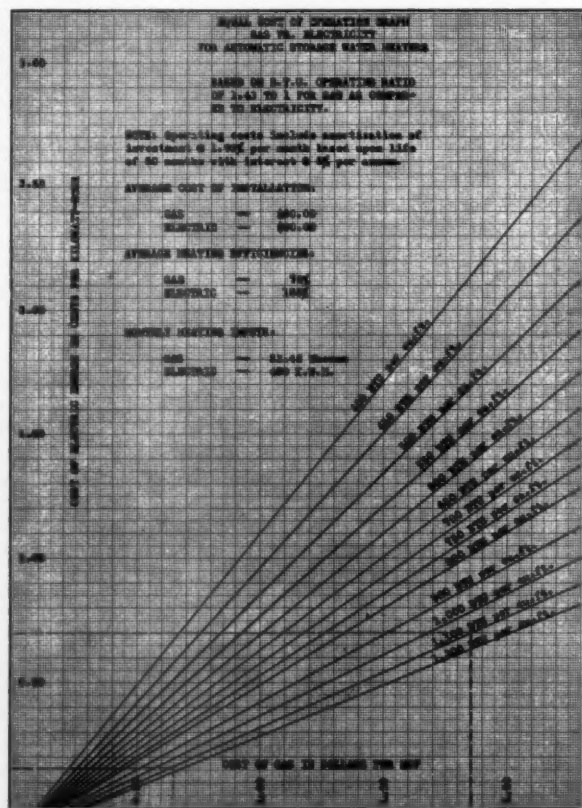


Figure 4. Graph of equal operating costs of gas vs. electric water heaters with various costs for the respective services and various heating values of gas

Personal AND OTHERWISE

Outstanding Natural Gas Leader Announces Retirement



Frank L. Chase

FRANK L. CHASE, for thirty-eight years an outstanding leader in the natural gas industry, on June 1 announced his retirement as vice-president of Lone Star Gas Company, Dallas, Texas. Elmer F. Schmidt, who was elected vice-president of the Lone Star in 1936 and who had served as general superintendent since 1920, has been appointed operating manager to succeed Mr. Chase.

Testimonial Luncheon

High tribute to Mr. Chase was tendered the retiring vice-president by executives and department heads of Lone Star Gas System at a testimonial luncheon in Dallas, June 5. In recognition of his twenty-two year service with the organization and as evidence of their esteem, his associates presented him with a watch. The presentation was made by L. B. Denning, Sr., president of Lone Star, who has been intimately associated with Mr. Chase since they both entered the gas business in Ohio more than thirty years ago.

Mr. Chase's outstanding contributions to Lone Star during his long service with the company were outlined by Mr. Denning and others at the luncheon. Emphasis was laid on the major role Mr. Chase played in developing Community Natural Gas Company, the distribution company which pioneered in bringing natural gas to small, widely scattered communities in Texas and Oklahoma, and on his development of gas reserves for Lone Star.

A graduate of Massachusetts Institute of Technology, Mr. Chase entered the employ of the New York Central Railway and as engineer of structure for the line built most of its bridges from New York to Chicago. He entered the gas business about 1900 in executive charge of eight companies which served Dayton, Springfield and towns in the Miami Valley of Ohio. In 1917 he went to Lone Star Gas Company, and his engineering skill and

broad gas experience were vital factors in helping the struggling Texas gas company locate additional gas supplies. Under his supervision the gas measurement department of Lone Star was organized. As operating manager, for twenty-two years he has had direct supervision of production, pipe lines, compressor stations, gasoline plants and telephone system for Lone Star.

Mr. Chase has rendered extensive service to the gas industry, having served as director of the former Natural Gas Association of America, chairman of the natural gas department of the American Gas Association, and member of management, executive and technical committees of the Association. For many years he has been active in every Southwestern association dealing with oil and gas.

In 1935 he was appointed to the newly formed Federal commission designated as the advisory board of the United States Bureau of Mines. In March, 1939, he was named a member of the American Petroleum Institute's central committee on measuring, sampling, and testing natural gas and natural gasoline.

Mr. Chase will maintain an office in the Lone Star Gas System headquarters building, Dallas.

To Administer Natural Gas Fund

N. C. MCGOWEN, president, United Gas Pipe Line Co., Shreveport, La., and past president, American Gas Association, has been appointed by the Executive and Managing Committees of the Natural Gas Section to the Committee on Supply Men's Fund. Mr. McGowen fills a vacancy created by the death of Samuel W. Meals, president of the Carnegie Natural Gas Co., Pittsburgh.

The Supply Men's Fund is used to finance graduate fellowships for relatives or members of families associated with the natural gas industry. The committee to which Mr. McGowen has been appointed awards these fellowships and supervises the fund. It was originally started by the old Natural Gas Association of America.

Executives Pay Tribute to R. B. Brown



R. B. Brown

IN a resolution adopted by the executive board of the American Gas Association high tribute was paid to R. B. Brown who retired as president of the Milwaukee Gas Light Company after 50 years of active service in the gas industry. His brilliant career included the presi-

dency of American Light & Traction Company and also of the Madison Gas and Electric Company. In his capacity as consulting engineer he built plants at Lowell, Worcester, Salt Lake City, Rockford, Chester, St. Louis and East St. Louis.

Mr. Brown was president of the Wisconsin Gas Association in 1910, vice-president and director of the American Gas Institute as well as first chairman of the Calorimetry Committee of the Institute. He was president of the American Gas Association in 1923, and has been a director of the Association for ten years. He is a member of the American Society of Mechanical Engineers, Wisconsin Utilities Association, American Institute of Illuminating Engineers and Milwaukee Society of Engineers.

The resolution passed by the board referred to his outstanding career and said in part:

"His record of achievement is long and noteworthy, and one of which any man may be proud. . . . His career reflects ambition, perseverance and accomplishment, and to those of his associates still in active service—and their names are legion—there comes a feeling of sincere regret that the time has arrived for him to leave his unceasing labors in our industry and enter into a new field—an interim of well-earned rest—search for definite leisure to explore the world in a boat like Marco Polo of old."

Mr. Brown left Milwaukee on April 30 in the yacht *Ranger* headed for Orcas Island in Puget Sound—8,000 miles away. The *Ranger* traversed the Illinois water route to the Mississippi, thence the Panama Canal and up the west coast to the island where Mr. Brown has a farm called Arcady. He carried with him the salute—Bon Voyage!—from his friends and associates in the gas industry.

Bivens Joins Columbia

E. D. BIVENS, treasurer of the Ohio Fuel Gas Co., Columbus, Ohio, resigned June 1 to become treasurer of the Columbia Engineering Corp. and assistant treasurer of the Columbia Gas & Electric Corp. with headquarters in New York. Mr. Bivens joined Ohio Fuel Gas Company as assistant treasurer in 1932 and was made treasurer the following year.

Book Reviews

"Air-Conditioning Engineers' Atlas" by Clifford Strock and C. H. B. Hotchkiss, 76 pages, including 18 colored maps; size 9 x 12 in. Published by The Industrial Press, 148 Lafayette St., New York, N. Y. Price \$2.00.

Heating and air conditioning engineers continually find it necessary to study weather data in connection with design and operating problems. The weather data that they need, however, are usually buried in such enormous masses of existing weather figures that it is frequently an impossible task to locate the desired information. The Air-Conditioning Engineers' Atlas is a new type of book presenting in condensed and usable form the climatic data needed for the solution of heating and cooling problems.

The Atlas consists of 18 sections, each containing a colored map of the United States, accompanied by pertinent data in tabular form; of these 18 sections nine deal with winter weather conditions and nine with summer weather conditions. The maps are zoned to show graphically, for all parts of the country, figures on the various phases of weather which are of concern to the heating and air conditioning engineer, while the tables contain supplementary data applying to the larger cities and their environs.

For the heating and air conditioning application engineer the Atlas furnishes extreme weather data required in calculating plant capacity. For the operating engineer it provides average climatic data for predicting operating quantities and obtaining good operating results. It is also useful in determining the potential markets for heating and air conditioning equipments and fuels, so far as climate is concerned.

The maps in the Atlas cover 18 full pages. These maps are printed in three colors and black, are unusually legible, and enable the determination of the desired figure for all parts of the United States. The subjects covered by the book are:

Winter Section:—Date Heating Season Begins in a Normal Year; Date Season Ends in a Normal Year; Number of Days During a Normal Heating Season; Average Temperature During a Normal Heating Season; Lowest Temperatures of Record; Outside Design Temperatures and Wind Data for Winter Heating; Number of Hours an Automatic Heating Plant Operates; Frost Penetration in Ground, and Number of Degree-Days in a Normal Heating Season.

Summer Section:—Average Maximum Daily Temperature for July; Highest Temperatures of Record; Relative Humidity in July; Temperature and Availability of Well Water; Surface Water and City Water Temperatures During the Summer; Summer Degree-Hours; Number of Hours Per Year of High Dry Bulb Temperatures; Wet Bulb and Simultaneous Dry Bulb and Dewpoint Temperatures; and Dry Bulb and Simultaneous Wet Bulb and Dewpoint Temperatures.

Elected to Presidency of Central States



C. L. Harrod

C. L. HARROD, president of the Laclede Power & Light Company of St. Louis, Mo., was elected president of Central States Power & Light Corporation at a meeting of the board of directors held on June 16. He succeeds B. F. Pickard, who has been elected to the

presidency of the Interstate Power Company with headquarters at Dubuque, Iowa.

Mr. Harrod will continue as chief executive of the Laclede Power & Light Company which position he has held since 1938. From 1930 to 1938 he was president of the Indianapolis Power & Light Company.

He is a past president of the Indiana Engineering Society and has been a lecturer before the engineering class of Purdue University, of which he is a graduate, for a number of years. He is also a charter member of the American Society of Military Engineers.

J. J. Welsh Heads Rotary Club

JOSEPH J. WELSH of the New York and Richmond Gas Co., Stapleton, S. I., has been elected president of the Staten Island Rotary Club. An employee of the gas company for 20 years, Mr. Welsh is the eldest son of the late William J. Welsh, former president and general manager of the company and treasurer of the American Gas Association. The late Mr. Welsh, in addition to serving as treasurer and director of the national Association, was president of the Empire State Gas and Electric Association and president of the Society of Gas Lighting.

Win McCarter Awards

TWO employees of The Philadelphia Gas Works Company, Philadelphia, Pa., were honored recently by the presentation of McCarter medals and certificates for outstanding acts of life saving by the Schafer prone pressure method of resuscitation. Howard Loose and Alvah Welch, both employed in the customers' service department, were presented with medals and certificates by Conrad N. Lauer, president of the company, at a meeting on June 27.

Mr. Loose received his award for an act performed on December 7 while Mr. Welch was cited for his quick action on January 27. These men had previously received thorough training in the prone

pressure method of resuscitation and were able to act with precision and effectiveness.

The McCarter awards are made by the Accident Prevention Committee of the American Gas Association, through the generosity of Thomas N. McCarter, recently retired president of the Public Service Electric and Gas Co., Newark, N. J.

Dr. Chaney Receives Science Award

DR. NEWCOMB K. CHANEY, director of research of The United Gas Improvement Company, received the Howard N. Potts Medal at exercises held at the Franklin Institute in Philadelphia, May 17.

The Howard N. Potts Medal is awarded for "distinguished work in science or the mechanic arts." It was awarded to Dr. Chaney "In consideration of his original and successful work in the hitherto uncharted field of carbon activation."

Specifically, Dr. Chaney is the inventor of the greatly improved form of gas mask carbon employed by the United States Army during the World War and supplied in large quantities to the Allied Armies. This new product developed by Dr. Chaney, unlike most war-time developments, found peacetime uses as well, and many important industrial uses for it have arisen since the War. It is an invention which conserves against waste and its largest commercial use is the recovery of valuable solvents from the air, thus permitting their re-use.

Dr. Chaney was granted basic product patents on his discovery. In commenting thereon a leading chemical engineering publication in 1924 stated, "It is the most sweeping patent granted in years and in view of the greatly increasing importance of adsorbent carbons it will be of greatest industrial importance."

Activated carbon has been used to recover gasoline from natural gas and waste vapors in various industrial processes. It is used in clarifying and filtering various liquids and is essential to the manufacture of chloroform from natural gas.

Brundage to Distribute Gas Refrigerators

HENRY M. BRUNDAGE, who recently resigned as sales manager of the Washington Gas Light Company, Washington, D. C., has announced the formation of H. M. Brundage Company, of Richmond, Va. The company will act as authorized wholesale and retail distributors for Servel Electrolux gas refrigerators in the State of Virginia. General offices of the company are located at 205 N. 7th Street, Richmond.

Mr. Brundage is well known throughout the gas industry, having served on the copy subcommittee of the National Advertising Committee and worked on many committees of the American Gas Association.

AFFILIATED ASSOCIATION

Activities

Advertising Group Elects Officers, Makes Better Copy Awards

E K. HARTZELL, of Eastern Tennessee Light & Power Co., Bristol, Tenn., was elected president of the Public Utilities Advertising Association at its annual meeting in New York, June 18-21, succeeding Howard F. Weeks, of the Consolidated Edison Co. of New York, Inc.

Other new officers are: H. J. Rowe, Iowa Electric Light & Power Co., Cedar Rapids, Iowa, first vice-president; A. C. Joy, Pacific Gas & Electric Co., San Francisco, second vice-president; Clara Zillesen, Philadelphia Electric Co., third vice-president; H. W. Olcott, Bozell & Jacobs, Indianapolis, secretary, and T. H. Spain, Public Service Electric & Gas Co., Newark, N. J., treasurer.

Better Copy Awards

Twenty-nine public utility companies won a total of fifty-nine advertising awards in the better-copy contest, it was announced at the convention by J. V. Macdonald, of Boston, chairman of the association's contest committee. The contest is held annually for all gas, electric and street railway companies in the United States and Canada. The awards to gas companies were as follows:

Public relations newspaper advertising—premier award, Consolidated Edison Co. of New York, Inc.; awards of merit, Westchester Lighting Co., The Cincinnati Gas & Electric Company.

Gas load building, newspaper advertising—premier award, Public Service Co. of Indiana; awards of merit, the Peoples Gas Light & Coke Co., Washington Gas Light Co., New York Power & Light Corp., Lone Star Gas Co., Pacific Gas & Electric Co., Jersey Central Power & Light Co., Westchester Lighting Co., The Cincinnati Gas & Electric Company.

Employee magazines—premier award, Philadelphia Co.; award of merit, Consolidated Edison Co. of New York, Inc.

Employee newspapers—premier award, The Cincinnati Gas & Electric Co.; award of merit, Public Service Corp. of New Jersey.

Domestic bill enclosures—award of merit, Washington Gas Light Company.

Special booklets and pamphlets—awards of merit, Public Service Co. of Northern Illinois, The Peoples Gas Light & Coke Company.

Gas window or inside display—premier award, Washington Gas Light Co.; awards of merit, Central New York Power & Light Corp., The Philadelphia Gas Works Company.

Poster advertising of all types—award of merit, The Peoples Gas Light & Coke Company.

Radio advertising—premier award, Consolidated Edison Co. of New York, Inc.

Motion pictures for public presentation—premier award, Public Service Electric & Gas Co.; awards of merit, Consumers Power Co., Pacific Gas & Electric Company.

Sound slide films—premier award, Public Service Electric & Gas Company.

Pennsylvania Natural Gas Men's Association

W H. HAUPT, president, Acme Drilling Co., Coudersport, Pa., was elected president of the Pennsylvania Natural Gas Men's Association at the annual meeting held June 3. George Wittmer, Jr., president, American Natural Gas Co., Pittsburgh, was named vice-president and B. H. Smyers, Jr., of Pittsburgh, was re-elected secretary-treasurer.

Fifty-one members and guests played golf in the afternoon at the Pittsburgh Field Club and 87 attended the dinner and annual meeting in the evening at the same place.

The following board of directors for the year 1939-1940 was elected: C. E. Bennett, president, Manufacturers Light & Heat Co., Pittsburgh; H. D. Freeland, president, Union National Bank, Waynesburg; D. S. Keenan, president, Carnegie Natural Gas Co., Pittsburgh; F. R. Phillips, president, Equitable Gas Co., Pittsburgh; B. D. Phillips, vice-president, T. W. Phillips Gas and Oil Co., Butler; S. C. Preston, vice-president, Peoples Natural Gas Co.; J. F. Robinson, president, Peoples Natural Gas Co., Pittsburgh; F. F. Schauer, vice-president, Equitable Gas Co., Pittsburgh; George E. Welker, president, United Natural Gas Co., Oil City; George Wittmer, Jr., president, American Natural Gas Co., Pittsburgh.

CONVENTION CALENDAR

AUGUST

- Aug. 9-16 American Transit Association, Annual Convention
San Francisco and Los Angeles
- 21-23 Appalachian Gas Measurement Short Course
University of West Virginia, Morgantown, W. Va.
- Aug. 23-25 National Association of Railroad and Utilities Commissioners
Seattle, Wash.
- 22-26 Home Service Conference and Training Course
Chapman Park Hotel, Los Angeles, Calif.
- 25-26 Maryland Utilities Association
George Washington Hotel, Ocean City, Md.
- 28-31 American Dietetic Association
Ambassador Hotel, Los Angeles, Calif.

SEPTEMBER

- Sept. 5-7 Pacific Coast Gas Association
Fairmont Hotel, San Francisco, Calif.
- 9 Gas Industry Day—Golden Gate Exposition
- 20-23 American Trade Association Executives
Westchester Country Club, Rye, N. Y.
- 21-22 Wisconsin Utilities Association—Accounting Section
Plankinton Hotel, Milwaukee, Wis.

OCTOBER

- Oct. 9 Gas Industry Day—New York World's Fair
- 9-12 American Gas Association, Annual Convention
New York, N. Y.
- 16-20 National Safety Council
Atlantic City, N. J.
- 19-20 Empire State Gas & Electric Association, Annual Convention
Westchester Country Club, Rye, N. Y.
- Wk. 23 National Metal Congress and Exposition*
Chicago, Ill.

* Includes exhibit sponsored by A. G. A. Industrial Gas Section.

Canadian Gas Association

THE thirty-second annual convention of the Canadian Gas Association which took place June 6 and 7 in Hamilton, Ontario, attracted a large attendance from many parts of the dominion and the United States. T. P. Pinckard, of Hamilton, Ont., president of the association, conducted the meetings which covered many practical and timely problems of the gas industry. A feature of the convention was the tribute paid to the memory of William Murdoch, founder of the gas industry, on the centennial anniversary of his death.

Julian Garrett, general manager, Northwestern Utilities Ltd., Edmonton, Alberta, was elected president of the association for the term 1939-1940. Other officers elected at the meeting are: first vice-president, J. B. McNary, Canadian Meter Co., Hamilton; second vice-president, John D. Price, Montreal Coke and Manufacturing Co.; secretary-treasurer, George W. Allen, 7 Astley Ave., Toronto 5, Ontario.

The following executive members were also elected: Frank D. Howell, Brantford; V. S. McIntyre, Kitchener; T. P. Pinckard, Hamilton; W. H. Munro, Ottawa; W. C. Philpott, Toronto; John Keillor, Vancouver; A. MacKenzie, Toronto; J. C. Dawson, Quebec City; J. R. McLinden, Owen Sound; W. J. Peard, Jr., Montreal.

Those elected Canadian representatives on managing committees of the American Gas Association include: G. R. Huxtable, Ottawa; J. D. Von Maur, Toronto; J. H. Wheatley, Montreal; and D. H. Thorburn, Hamilton.

The 1940 convention will be held July 3-5 at Jasper Park Lodge, Jasper, Alberta.

Ohio Gas and Oil Men's Association

ABANDONING the former procedure of annual conventions, the Ohio Gas & Oil Men's Association now holds group meetings in lieu thereof, and at various points in the State.

The most recent group meeting was held at the Deshler-Wallick Hotel, Columbus, Friday, June 23, at which an interesting program dealing with Sales and Service was declared one of the most successful meetings.

Speakers before the group and their subjects were as follows:

"Injecting News into Utility Advertising"—James E. Humphreys, The Ohio Fuel Gas Co.; "Appliance Servicing from a Woman's Viewpoint"—Miss Jeannette Campbell, The East Ohio Gas Co.; "The Utilities Service Responsibilities"—David R. Edwards, The Ohio Fuel Gas Co.; "Securing the New Home Market"—Carl Wessling, Cincinnati Gas & Electric Co.; "Gas in the U. S. H. A. Projects"—George E. Duane, Dayton Power & Light Co.

The after dinner speaker, E. M. Tharp, vice-president & general manager of The Ohio Fuel Gas Company, treated the group

to a discourse on the subject of "Sales Is Service" that will long remain in the minds of his listeners. This talk was logical, forceful and pertinent.

Preceding the group meeting the board of directors of the Association held a meeting at which the following officers were elected: President, T. C. Jones, president, The Delaware Gas Company; Vice-President, W. R. Pringle, special counsel, The East Ohio Gas Company; Secretary-Treasurer, Frank B. Maullar, former member, Public Utilities Commission of Ohio, re-elected; Executive Committee: T. C. Jones, L. A. Seyffert and W. R. Pringle.

Maryland Utilities Association

THE annual Fall convention of the Maryland Utilities Association will be held at the George Washington Hotel, Ocean City, Maryland, on Friday and Saturday, August 25 and 26, according to an announcement by J. H. Purdy, secretary.

There will be combined meetings of the gas, electric and transportation groups, with addresses by prominent speakers. Entertainment has been provided for Saturday afternoon and evening.



Gas industry officials lunching at the Court of Flames Restaurant at the New York World's Fair during the A.G.A.E.M. annual meeting. Left to right, are: A. P. Tappan, J. W. West, Jr., Miss Jessie McQueen, H. N. Ramsey, and E. R. Guyer, president, A.G.A.E.M.

Manufacturers Told How Gas Started New York's "Great White Way"

NEARLY 200 executives of gas appliance manufacturing companies who gathered in New York City May 24-26 at the annual meeting of the Association of Gas Appliance and Equipment Manufacturers now know how the city's far-famed "Great White Way" got its start—with the aid of gas. "In 1826, 120 gas lamps were installed on Broadway, from the Bowery to Grand Street, replacing 75 oil lamps." Nicholas J. Kelly, chief engineer of the city's utility department, told the delegates.

Mr. Kelly also told the manufacturers that the New York World's Fair, because of its wide use of gas and its dramatization of the fuel, might even start a new era for the industry.

E. R. Guyer, of Chicago, president of the Association of Appliance and Equipment Manufacturers, who presided, urged the membership to continue to expand advertising and promotional activities during the year.

C. W. Berghorn, managing director of the association, reported that the membership now included 350 manufacturers of gas appliances, accessories and equipment from all parts of the country. R. S. Agee, sales promotion manager, domestic gas range

division, A.G.A.E.M., spoke on "Opening Our Eyes and Closing Our Sales."

Speakers at the second day's session were Senator H. Styles Bridges, of New Hampshire, G. E. Frazer, of Chicago, A.G.A.E.M. counsel, and George V. McLaughlin, president, Brooklyn Trust Company, Brooklyn, N. Y. Mr. Frazer declared that government regulations affecting manufacturers were increasing in intensity.

A plea for unity and national action as an industry was made by Hugh H. Cuthrell, president of Gas Exhibits, Inc., at the closing session held in the Court of Flame Theatre of the Gas Industries exhibit at the New York World's Fair. Saul Cohn, president of the National Retail Dry Goods Association, was the principal guest speaker at the morning session. Mr. Cohn praised the gas appliance manufacturers for the improvements made in the design and construction of their products and for having "kept pace with modern trends and developments."

Following the opening general session, meetings were held by the following divisions: domestic gas range, gas water heater, gas meter and regulator, gas house heating and air conditioning, hotel, restaurant and commercial gas equipment.

Local Groups Invited To Court of Flame

ANY local groups, such as civic and business clubs, women's organizations, and others who plan visits to the New York World's Fair may use the meeting facilities of the Gas Industries Building without charge if advance arrangements are made. The Court of Flames Theatre, seating 300 people, is available for such meetings in the mornings up to 1:00 P.M. The afternoons are devoted to showings of the famous Victor Puppet Opera. Excellent dining facilities are available at moderate prices at the Court of Flames Restaurant in the same building.

Gas companies are urged to notify local groups of the availability of these facilities. Arrangements can be made direct by writing Louis Stotz, Gas Industries Building, New York World's Fair, Flushing, L. I., N. Y.

World's Fair Home To Be Reproduced

POPULAR interest in Homewood, the All-Gas Good Housekeeping Home which is a feature of the Gas Industries Exhibit at the New York World's Fair, has been so great that a number of gas companies are sponsoring reproductions of the home in their communities.

To encourage other companies to reproduce Homewood in their localities,

Gas Exhibits Inc. will supply plans and specifications either for a one-story house, a slightly smaller version of the World's Fair house, or for a two-story structure modified from it, designed by the famous architect, Dwight James Baum, for Good Housekeeping. These will be supplied at a cost of \$25.00 for three sets of blueprints and specifications for either house. Any houses erected must be sponsored by the local gas company and must conform to Good Housekeeping's National Program for Better Standards in Building. In addition, Gas Exhibits Inc. requires that A. G. A. approved gas appliances must be used.

Attractive illustrated folders describing Homewood are available to gas companies at a cost of \$11.00 per thousand. Literature may be secured from Gas Exhibits Inc., 60 East 42nd St., New York, N. Y.

Fair Issue of "Forum"

THE June issue of *The Architectural Forum* carries 130 pages of attractive illustrations and text describing the Fairs at New York and San Francisco. On pages 16 and 17 of this issue appear two facing advertisements describing the use of gas at the New York Fair. One is the regular page advertisement published in behalf of the gas industry's national advertising program and the other page is sponsored by the promotion department of American Meter Company in the interest of the gas industry.



J. S. Rider, of Anderson, S. C., shown with the gas kitchen combinette which he invented

Gas Kitchen Combinette

WHEN the housewife wants hot water she turns a faucet; when she needs heat for her kitchen she turns a key. That's the story in a nutshell of the gas kitchen combinette developed by J. S. Rider, of the Anderson Gas and Utilities Company, Anderson, S. C., which consists of an automatic water heater, kitchen heater and table constructed in a cabinet.

This appliance has been developed to reach the low income market and represents another of the efforts in this direction by individuals and gas companies who see the need for new equipment to tap this valuable market. Others reported in the A. G. A. MONTHLY include the Worcester combination heater described on page 59 of February issue and the three-purpose gas range discussed on page 222 of the June issue.

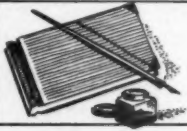
In a letter discussing his combination, Mr. Rider says: "What I have is automatic, of good appearance and has met with excellent public acceptance. It is just what the housewife has been wanting. It makes possible the sale of water heaters the year around as well as the use of gas fuel. It is, of course, a well-known fact that in many cases hot water is supplied from some other source during the heating season, leaving the gas water heater for summer use."

In so far as capacity is concerned, Mr. Rider writes, "the appliance is flexible enough to alter the capacity within reasonable limits. We are using two eleven-gallon tanks and radiator equivalent to thirty feet of steam radiation."

A.G.A. Executives Entertained at Golden Gate Exposition



A highlight of the A. G. A. executive conference in San Francisco, May 15, was this dinner in the patio of the gas industry exhibit at the Golden Gate International Exposition. Delegates to the conference toured the Fair after inspecting the exhibits



Accounting SECTION

H. A. EHRMANN, *Chairman*
F. B. FLAHERTY, *Vice-Chairman*
H. W. HARTMAN, *Secretary*

A Gas Company Answers John Q. Public's Requests

By H. E. STEINER

*Niagara Hudson Power Corp.,
Syracuse, N. Y.*

WE'RE moving," "I smell gas," "Our bill never was, etc.," "The range won't work," "I can't pay my bill until Friday," "I want my heater adjusted," "I lost my bill," "Etc., etc., etc." Requests come in all day and part of the night to this gas company. To the company they represent a part of the thousands of requests received monthly. To Mr. and Mrs. John Q. Public they represent only one request made to a large company. Courtesy, promptness and skill are essential in service performance, if it is to meet with John Q. Public's idea of what service to him should be. To meet this high individual standard, this gas company has tuned its organization to three cardinal principles of good service—courteous and intelligent interview, quick dispatching, and prompt and skillful execution.

Centralized Organization

This company has centered all incoming public contacts in two places, viz., the telephone service board and personal contact office. Mail requests are distributed to either department, depending on their nature. Girls, exclusively, are employed in the telephone department, and are chosen for ability and pleasing telephone personality after a period of training in other departments. The personal contact department employees are predominantly men who have attained considerable maturity and experience with the company. All requests or inquiries are handled by the clerk making the original contact. Little journeys by telephone, i.e., the transferring of calls from one phone to another, and the directing of customers from one place to another, are entirely eliminated.

The personal contact department is organized under the friendly service clerk plan, with a desk and a chair for the clerk and a chair for the customer. Requests received in this department involve collection contacts, duplicate bill requests, orders for cut-in and cut-outs, and miscellaneous, with the volume in the order named.

In the case of collection contacts, each clerk has available a record of delinquent customers to whom disconnect notices have been mailed, together with their

record of delinquency during the past six months. This is furnished daily by batch at the expiration of the discount date. On accounts other than these, the clerk calls the bill information unit for data required. From information thus received, the clerk is able to determine the propriety of granting payment extensions, etc. Duplicate bills are readily available in a nearby file, having been provided at time of billing.

Requests requiring field execution are written in ditto pencil and are forwarded at once to the ditto machine operator, located in the dispatcher's office, who prepares additional copies where needed. Requests are then given to the dispatchers.

Outside contact men are employed in the personal contact department to call at customers' homes on high bill complaints, or in cases where a satisfactory contact was not made in the office or on the phone. Deposits are taken and refunded by the personal contact clerks after obtaining the necessary information by telephone from the bookkeeping or collection departments. Every effort is made to make contacts as pleasant and helpful as possible to Mr. and Mrs. Public from the time that the hostess guides them to the proper desk until she wishes them a "Good Day" as they are leaving at the completion of their business.

Call Routine

No records are available in the telephone contact department, and with the exception of orders to be executed in the field, the operator must obtain the necessary information to answer Mr. and Mrs. Public's query from the other departments. Accordingly, information regarding payment extensions, deposits, etc., is obtained from the collection department, and amounts of bills, status of accounts, etc., from the bookkeeping department. The departments giving information to operators are keyed to give prompt and efficient service in order that the customer will not be held unduly long on the phone. If, for any reason, it appears that information cannot be promptly obtained, the operator is notified and she will request from the customer the opportunity of calling back.

The service board is equipped with a moving conveyor belt on which orders for execution in the field are placed as soon as they are received. The orders drop off the belt in the dispatcher's office, which is immediately adjacent to the service board. Requests received by the telephone operators involve requests for service, appliance adjustments, miscellaneous requests, including leaks and low pressure, the volume in order named.

The dispatchers maintain two files of orders, known as the "Out Today" file and the "Future" file. All orders coming to the dispatchers are written in ditto pencil with the name and address lettered for better legibility. Only one order is received for a transfer of service, the "In" and "Out" being on the same order. It is necessary then to ditto only an extra meter order for a transfer and for the future file. One copy of the order is filed by date in the future file, and the other copy is filed geographically.

Handling Service Orders

On the appointed day, orders are removed from the date and geographical future files and one copy is given to the service man for execution, while the other is placed in the "Out Today" file. During the day, as orders are received which require execution the same day, they are placed immediately in the "Out Today" file. Service men call in hourly and orders received during the past hour are called over the phone. The phone order is written by the service man on a form the same size and structure as the original order. At the end of the day, service men turn in all orders which were received by them and at night these are matched with the copies in the "Out Today" file.

All orders must either have been completed or have attached a "Why Not" slip, giving the reason for non-completion. One copy of the order is forwarded to the meter order section of the bookkeeping department, while the other copy is filed as a record of completed orders. With dispatchers' files maintained in this manner, the dispatcher need only look in one file to know the status of any order upon request of the operators on the service board. If no date on which service was requested is available, the dispatcher will look in the "Future" file, as well as the "Out Today" file. This method pro-

Contributed by the Customer Accounting Committee, H. E. Cliff, Chairman.

vides quick and accurate dispatching with paper work reduced to a minimum.

A record is maintained of the type and number of contacts received from Mr. and Mrs. Public, together with the period of time taken to execute the request if field work is involved. A continuous program of training and education is conducted with customer service clerks, dispatchers and service men. Joint weekly meetings

are held with the personnel and supervisors of the various departments involved in answering John Q. Public's requests, at which meetings cases involving complaints, etc., are discussed and an effort is continually made to improve and speed service. The personnel, from supervisor down, are proud of their service record and every effort is made to maintain and improve it.

of clerks operate these files, transmitting service orders, as required, to the nearby dispatcher's desk, also operated 24 hours a day. In another bay 21 cabinets of similar design, but whose files are arranged by customer names on a Sound-Ex basis rather than a geographical one, contain customer history records.

The service files are currently handling about 2,400 meter orders and service investigations daily with approximately 50 per cent of the requests coming from outside phones, 25 per cent from the main office customer interview department and 25 per cent from the branches.

Main office customer interview desks,

New Customer Service System Increases Efficiency

A NEW customer service system, designed to facilitate company operations and to further improve customer relations, has been virtually completed by the Detroit district of the Michigan Consolidated Gas Co.

The new system is part of a progressive program instituted by President William G. Woolfolk who describes the altera-



Main office customer interview department where all routine customer business can be transacted. Twenty-four desks, connected by dictograph to record divisions, handle approximately 26,000 customers a month, with daily contacts from 1,000 to 1,600

tions as "our face lifting." In a more serious vein Mr. Woolfolk considers the new customer system as a major step in building for the future.

The new customer service plan is based on the principle of friendly, personalized dealing with each of the district's more than 400,000 customers. To assist in carrying out this principle, a file and record installation, designed by Remington-Rand and said to be the largest of its kind, has been developed.

The record system is linked with customer interview departments in the main office and the Company's nine branches by intercommunicating phone. Thus, interview clerks are able to have service or account information within a few sec-

onds. Customers calling from outside telephones can be connected directly with file clerks in the record divisions if service information is wanted. And the record information is equally available to the special department known as "account inquiry" whose clerks can communicate with the record divisions while handling a telephone call from a customer on the outside.

Customers as well as the operating staff have declared their satisfaction with the new system which makes for speed, accuracy and courtesy.

Twenty-three metal cabinets in one second-floor bay, each containing the service records for approximately 20,000 customers, are open 24 hours a day. Three shifts



Twenty-three cabinets in this bay, each containing the service record for approximately 20,000 customers, are open 24 hours a day. Three shifts of clerks operate these files. Information in these files is available to customer clerks on the main lobby floor, branch office customer clerks, or customers who telephone direct. Customer clerks are connected with the files by intercommunicating phones

of which there are 24, handle from 1,000 to 1,600 customer contacts daily.

Extensive physical changes to the entire customer division will be rounded out by mid-summer when the new Home Service Department, relocated in the basement of the main building, is expected to be ready for use.

Meter Readers Given Keys To Homes

DID you know that the meter reading department of the Citizens Gas and Coke Utility, Indianapolis, Ind., has in its custody more than 1,300 keys to the homes of Indianapolis residents? These keys are given the utility so that meter readers may enter the homes of customers who are not home and make accurate meter readings.

The meter readers are proud of the fact that customers place such confidence in them.

—The Gas Flame.



Commercial SECTION

F. X. METTENET, *Chairman*

DAVIS M. DEBARD, *Vice-Chairman*

J. W. WEST, JR., *Secretary*

How the Federal Housing Program Helps the Gas Industry

By THOMAS G. GRACE

New York State Director, Federal Housing Administration

FOR more than four years now the organization which I represent has been working in close alliance with your industry. During all that time we have had no differences of opinion on what constitutes real public service. Our objective has been the creation of small homes for people of moderate means. Yours has been the job of equipping those homes with the essentials that make for comfortable living. There are so many things on which we are mutually dependent that I was very glad when Mr. Leinroth asked me to come here and speak today. It is the first opportunity I have had to tell you what we think you have done to further the work of the Federal Housing Administration and what we think we have done to advance the interests of your industry.

Home Building Encouraged

You cannot just throw houses together nowadays and get people to either buy or rent them. The humblest of our people expect everything in the way of modern improvements. Our job has been to induce a free flow of mortgage money so that solvent people in the moderate wage brackets could acquire homes on terms that would not be too onerous and by making monthly payments over long periods that are really below normal rent levels.

We do not lend money, we do not build, plan or sell houses. But by insuring approved financial institutions against loss on mortgage advances that they make on properties coming within our regulations we have released billions of dollars of private capital and put it to work in a time of acute need.

Before we approve a mortgage insurance application we satisfy ourselves that the borrower is sound, that the neighborhood is satisfactory, that the house is properly designed and built and that included in its equipment is all that is latest and best in equipment. The truth of the matter is that we couldn't operate a day if it wasn't for the contribution that utilities like gas make to the modern home. Actually your equipment is mandatory under our minimum requirements code so you needn't be too grateful to us if we

have managed to help you out during the years of economic stress.

What you can thank us for if you feel so inclined is the speed with which we are going ahead in encouraging home construction and thus creating new living units for you to equip. In approximately four years we have brought close to 400,000 new homes into existence in this country and that does not take into account the thousands of family units created by our large scale housing operations which are aimed at renters rather than buyers. Let me say right here that there are no signs of a let-up in this housing activity. Each month shows a definite advance over the month before and the year by year record is almost staggering in its implications. All signs point to a record year in 1939 which is saying a great deal when we consider what was accomplished in 1938 under the greatly liberalized National Housing Act.

No Subsidy Used

Just on the chance that all of you do not understand it, let me say that this tremendous task has been carried through without benefit of subsidy. Not only do we not use any public monies but through the revenues we received in moderate appraisal fees and mortgage insurance premiums, we have made ourselves practically self-supporting. Every dollar that we produce for home construction or for property improvements is private capital. Under our regulations it has to be spent at once and for the specific purposes for which it is borrowed.

This has meant employment for men and women, purchases of durable materials and the application to the daily home lives of thousands of people of utilities like gas, and electricity. Frankly if we could not dig out the money to pay for gas and gas equipment you couldn't sell either and by the same token if you weren't on the job to put these things in a home we couldn't get people to build or buy houses. So you see we are after all in a sort of partnership out of which we both profit, you in a more ma-

terial sense than we; as ours is primarily a social service.

As this is more or less a regional meeting and I am the head of the Federal Housing Administration in New York, I think it would be best if I discussed briefly the situation at home rather than try to give you the national picture. In this State we have insured approximately 25,000 mortgages on small homes for a total of about \$125,000,000. In multi-family projects for rental purposes we have insured mortgages on 24 operations containing about 5,500 family units. Few if any of these living units are unoccupied today so I may say that because of our effort you are selling gas to about 35,000 families which have been housed under our system in a little less than four years. Doubtless many of these were gas users before they joined up with us, but certainly not to the extent that they are today when they are applying your fuel to heating, to cooking, to refrigeration, to supplying hot water and to innumerable other uses.

FHA Program

During the discouraging years that followed 1929 and 1930 thousands of home owners in this country were obliged to stand idly by and watch the deterioration of their properties simply because they could not obtain money to keep them up. The factor of obsolescence also entered into the situation and right here was a grave problem indeed. That it was solved at all was due to the modernization and property improvement loans fostered by the Federal Housing Administration. These have now run close to a billion dollars in this country and a very substantial portion of this money has gone into modern gas equipment. In April 1937 this type of financing was dropped but it was resumed in February 1938. Since then more than \$300,000,000 has been borrowed by home owners and small businessmen for the modernization of their establishments. That this plan of credit will be extended after June 30 next, which is the limit of the present law covering this type of loans, seems certain as both houses of Congress have accepted the idea in principle.

Thinking over the housing situation here after I received Mr. Leinroth's invitation to speak at this gathering, I was

Address before New York-New Jersey Regional Gas Sales Conference, New York, N. Y., June 1, 1939.

struck by the similarity of our objectives. We are interested in good construction, you are interested in good appliances. Put these things together and you have a satisfied customer. We need stability to protect our mortgage insurance, you need it to protect your gas load. Both of us insist on good construction, we to reduce cost of maintenance, you to reduce the cost of using gas and modern gas appliances and thus promote a more extensive use. Both of us are committed to good wall and roof construction with low heat loss, efficient and durable appliances and equipment which has been tested and approved.

The gas industry is I believe about 90 years old. During that time it has made steady progress, adapting itself from time to time to the needs of consumers. Gas cooking took the lead over gas for illumination, quickly developing into the base load and then gas house heating became a field of intensive development. The reduction of gas rates from \$1.15 per thousand cubic feet to 52 cents, a development of the past few years, has brought all forms of gas service within the reach of even the humblest of our people. We are not unmindful either of the specifications and standards set up by the American Gas Association or of the promotional activities employed, many of which have operated to the advantage of the construction industry. In fact I might say that in progressive development the gas industry and the construction industry have forged ahead side by side, and that fact I can assure you has been of immense advantage to the Federal Housing Administration.

Helping Each Other

I am not here to urge your co-operation with the Federal Housing Administration because that we already have, but rather to emphasize how we can continue to help each other and at the same time render a valuable public service. We would like you to keep constantly in mind that the class of new home owners coming into existence through the insured mortgage system are drawn from the lower income groups. When they purchase a home they are assuming an obligation to which they will necessarily have to devote a large part of their income over periods of from twenty to twenty-five years. They should be helped and encouraged in every possible way. The gas industry has done a fine job in reducing costs and increasing the efficiency of its service so all I can say to you is to keep up the good work and you will find the Federal Housing Administration standing firmly behind you.

Naturally when we view such a rapidly growing housing movement as we have had in this country in the past four years we ask ourselves how long it will last, when is it going to end? The most conservative study of the potentialities of the situation convinces me that there is no reason for it to end at all. We are not in that most dangerous of all things—a boom.

Rather we are in a building movement that is progressing along constructive and healthful lines. This is proved by the fact that sales of homes are keeping well abreast of construction. There has been no over production and short of a national collapse of our economic structure, there are and will be for many years plenty of prospective customers for homes.

The people who are buying the kind of houses that we are promoting are in the main people with incomes from \$1,500 to \$3,000 a year and remember that the monthly payments they are required to make in liquidation of their mortgage debt is almost always below what they have been accustomed to paying in rent. There are millions of that class of people in this country today who are still a market for our efforts, but to reach them we have got to have adequate educational effort and fair and square treatment from those on whom

they must depend for the comforts and safety of their homes.

No, I am not afraid of reaching the saturation point. Actually I think that well as we have done so far, we have not more than scratched the surface. There are other public utilities to which I would like to pay tribute for the aid they have given the Federal Housing Administration in its effort to provide real homes for the mass of the people but I guess I had better confine myself to gas for today. I would like to say, however, that the work we have done could never have been accomplished but for the fine spirit of co-operation shown by the utilities, by financial institutions, by architects and realtors, by material manufacturers and by newspapers and magazines of the country which have helped us in an educational effort which has proved itself a real selling force for the housing movement.

New York-New Jersey Gas Sales Conference Stresses Housing

SALES of manufactured gas in New York and New Jersey increased 3.9 per cent in 1938, largely as a result of more effective promotion by the gas industry, J. P. Leinroth, of the Public Service Electric and Gas Co., declared in his opening address as chairman of the New York-New Jersey Regional Gas Sales Conference. The conference, which was sponsored by the Commercial Section of the American Gas Association, was held Thursday and Friday, June 1 and 2 at the Hotel New Yorker, New York City.

Mr. Leinroth pointed out that sales of gas for domestic purposes in 1938 rose 2.5 per cent. This upward trend continued during the first quarter of this year.

Hugh H. Cuthrell, pinch hitting for Clifford E. Paige, president of The Brooklyn Union Gas Company, who was unable to be present, delivered the keynote address. He said that today the gas business has left the cross-roads, "and having taken the right turn, marches valiantly and confidently into that tomorrow visualized by the World's Fair."

Reporting on trends in residential consumption, John B. Reid, of the Columbia Gas and Electric Corp., co-chairman of the A. G. A. Committee on Market and Economic Research, described various factors contributing to the upturn in domestic gas sales. He cited a recent survey in which utilities and manufacturers reported increased advertising budgets and larger sales. The national advertising campaign was strongly approved.

Mr. Cuthrell appearing on the program a second time as president of Gas Exhibits, Inc., emphasized the tremendous promotional possibilities in the fact that gas was the dominant fuel at the New York World's Fair. He urged the delegates to tell the story of gas at the Fair to local prospects.

Unquestionably the hit of the conference was the symposium on housing Thursday afternoon at which R. P. Wagner, New York Power and Light Corp., Albany, presided. Of particular significance was the address of Thomas Grace, State director of the Federal Housing Administration, which appears in full in this issue of the MONTHLY.

Lee Perry, architect and builder of the Westminster Ridge Development, White Plains, N. Y., attributed his remarkable success in selling all-gas homes to careful selection of appliances and equipment. An increased home demand in Queens, with 80 per cent of the houses he is building using gas, was reported by F. J. Principe, president of Hyatt Realities, Inc., Ridgewood Plateau.

Howard Myers, editor of The Architectural Forum, discussed the trend of building in the last ten years and said that building is now on the way back. The average home buyer "receives more house for his money today than he did ten years ago," Joseph B. Mason, eastern editor of American Builder and Building Age, declared.

Promotion of gas for the "Four Big Jobs" was the theme of the Friday morning and afternoon sessions. Speakers included the following: Water Heating—R. A. Lawder, Consolidated Edison Co. of New York, Inc., and B. A. Seiple, Jersey Central Power & Light Co., Asbury Park; Refrigeration—H. S. Christman, The Philadelphia Gas Works Company; House Heating—H. G. Schaul, Westchester Lighting Co., Mt. Vernon, chairman, A. G. A. House Heating and Air Conditioning Committee; CP Ranges—John E. Bogan, Association of Gas Appliance and Equipment Manufacturers.

A feature of the conference was the demonstration of sales training methods

used by The Brooklyn Union Gas Company by Harold F. Coleman, of that company. A CP sales floor demonstration, "Right Off the Range" was presented by Marjorie Wardman and Loretta Grow, Long Island Lighting Co., Bay Shore.

Presiding officers at the Friday sessions were: H. W. Bennett, Greenwich Gas Co., Greenwich, Conn., and A. H. Palmatier, Rockland Light & Power Co., Nyack, N. Y.

Home Service Group Visits Fair

HOME SERVICE women from public utility companies in the vicinity of New York met Tuesday, June 13, at the Court of Flame theatre of the Gas Industries Building at the New York World's Fair and learned of the important role this country's gas industry and its fuel play in the exposition. They were told that women in the World of Tomorrow will lead in the professional cooking field. Mrs. Sally Ambrose, home service director of the Consolidated Edison Company of New York, presided at the meeting.

The principal speakers on the program were George Rector, world-famous food authority and official host of the Gas Industries Building at the Fair, and George F. Owens, assistant vice-president of The Brooklyn Union Gas Company, of Brooklyn, N. Y.

Also included on the program were Miss J. J. Walsh, of Winchester, England, and Miss Anne Tonseth, of Bergen, Norway, who described the home service training and activities in their respective countries.

The program was arranged by a committee of which Miss Jessie McQueen, home service counsellor for the American Gas Association, was chairman.

Home economics editors of leading

women's magazines attended the World's Fair meeting. Among them were: Elizabeth Korthauer, of *McCall's*; Eloise Davison, of the New York *Herald-Tribune*; Katherine Fisher, of *Good Housekeeping*; Grace Penock, of *Ladies Home Journal*; Ada Bessie Swann, of *Woman's Home Companion* and Ruth Whiting, *American Home*.

Following the meeting, a luncheon was

held in the garden patio of the Court of Flame restaurant. Later the home service women and their guests inspected Homewood, the model all-gas home which is part of the Gas Industries exhibit group. They also attended a performance of the Victor Puppet Opera whose stringless puppets presented "La Traviata."

Company Sales Leaders Announced in Refrigeration Contest

COMPANY winners in the "Man-the-Sales" or "Flying Cloud" gas refrigeration sales campaign during May have been announced by R. J. Rutherford, chairman of the American Gas Association Refrigeration Committee.

The Brooklyn Union Gas Co. stood first in the greatest total reported installations in Division 1 during the month; The Philadelphia Gas Works Co. stood first in the greatest number of installations per 10,000 meters. The latter company's sales also resulted in the greatest percentage of increase in installations over those of May last year, and the greatest total reported installations in Section A.

Washington Gas Light Co. (also in Division 1) had the highest standing for the greatest total reported installations in Section B; Brooklyn Union had a similar standing in Section C.

Providence Gas Company stood first in Division 2 both in the greatest total installations class and in the 10,000 meters class; Laclede Gas Light Co., of St. Louis was second in greatest total installations, and New Haven Gas Light Co. was second in the 10,000 meters class.

Greenwich Gas Co. (Greenwich, Conn.),

and Florida Public Service Co. (Orlando, Fla.), stood first and second, respectively, in the 10,000 meters class in Division 3A. In Section A of the same division, Roanoke (Va.) Gas Light Co., and Atlantic City (N. J.) Gas Co. were first and second in greatest total reported installations; in Section B, Florida Public Service Co. and Greenwich Gas Co. were first and second in the same classification.

Ohio Fuel Gas Co. (Columbus), and Michigan Consolidated Gas Co. (Grand Rapids), were first and second in the greatest reported installations class in Division 4; Texas Public Service Co. (Austin) and Peoples Gas Co. (Port Arthur, Texas) were first and second in the 10,000 meter class.

North Penn Gas Co. (Port Allegany, Pa.) had the highest standing both in the greatest total installations class and in installations per 10,000 meters in Division 5; the Ohio Fuel Gas Co. of Lorain, Ohio, and the same company in Jackson, Ohio, stood second in the same classifications.

Virginia Gas Distribution Corp. (Staunton, Va.), Greeley Gas & Fuel Co. (Greeley, Colo.), Tex-Mex Natural Gas Co. (Houston, Texas) and United Gas Corp. (Sinton, Texas), all in Division 6, stood first, second, third and fourth in greatest total reported installations.

EHFA Will Finance Gas Appliances

THE Electric Home and Farm Authority, Washington, D. C., has announced that it is now prepared to finance the sale of domestic gas appliances on a plan that is identical, in so far as practical, with the authority's electric appliance plan. The gas appliances that are eligible for financing under this plan are: ranges, refrigerators, water heaters, furnaces and conversion burners.

The EHFA is preparing a pamphlet describing the financing of gas appliances which will be issued shortly.

Gas is the overwhelming choice for cooking in the restaurant kitchens of Today and Tomorrow at the World's Fair—demonstrating completely the modernity and superiority of gas over all competitive fuels.



Home service women and their guests who learned about the major role of gas in the World of Tomorrow at a special meeting in the Gas Industries Building, June 13. The photograph was taken in the court of the building



Industrial Gas SECTION

F. H. TREMBLY, JR., Chairman

F. T. RAINEY, Vice-Chairman

E. D. MILENER, Secretary

Steady Growth of Commercial Gas Business Noted at Brooklyn Sales Conference

A BLUEPRINT for sales, or at least a clean cut program for obtaining more hotel, restaurant and commercial gas business, was laid down at the 1939 A. G. A. conference covering this field which took place May 22 and 23 at the Hotel St. George, Brooklyn, N. Y. Sponsored annually by the Industrial Gas Section, the conference was attended by more than 200 specialists in the industrial and commercial gas field.

Thirteen well-qualified speakers analyzed the industry's progress and offered practical suggestions for strengthening this important load. The schedule of subjects included: commercial refrigeration, salesmen's time, modern sales approaches, management's viewpoint, beauty parlor possibilities, 180-degree water, gas heating for Main Street, capitalizing on the World's Fair usage of gas, the bakery market, sterilization in public eating places, manufacturers' problems, and future commercial prospects.

Frank B. Herty, The Brooklyn Union Gas Co., headed the committee in charge of the program. Mr. Herty presided over the Monday afternoon session, while Frank H. Trembly, Jr., chairman, Industrial Gas Section, led the Monday morning and Tuesday afternoon meetings. Franklin T. Rainey, vice-chairman of the Section, conducted the Tuesday morning session.

Gas Prospects Never Brighter

Clifford E. Paige, president, The Brooklyn Union Gas Co., and past president, American Gas Association, in the feature address before the Monday luncheon meeting, declared that prospects for the gas business were never so bright as at the present time. He said that it was significant that we have made progress in the face of difficulty, and that, thanks to competition, we are no longer smug and complacent but have become an aggressive and growing industry.

"The hotel, restaurant and commercial field," Mr. Paige predicted, "will become an increasingly important branch of our operations—large volume low-rate gas usage being most important today from the standpoint of revenue as well as load-building." The progress of commercial gas sales in Brooklyn was referred to and credited with 17 per cent of the company's send-out. Particularly successful in Brooklyn have been campaigns for unit heater installations. Also, the looming commercial

refrigeration load was referred to as particularly desirable.

In conjunction with the conference an 18-unit exhibit was set up showing the latest models of gas-fired counter appliances manufactured by 10 different companies.



Clifford E. Paige, president of The Brooklyn Union Gas Company, delivering the keynote address during the sales conference. At the left are Hugh Cutbrell, vice-president of the Brooklyn company, and Franklin T. Rainey, vice-chairman of the Industrial Gas Section

Roy P. Wilson, The Philadelphia Gas Works Company, chairman of the Section's Commercial Refrigeration Committee, opened the first session with advice on "Penetrating the Commercial Refrigeration Field." "In general," he pointed out, "you can't sell a commercial gas refrigeration unit alone—it must be sold in conjunction with the other elements for the customer's refrigerating system."

To speed up penetration of this new market Mr. Wilson recommended: (1) more competitive selling prices, (2) more competitive gas rates for this class of customer, (3) an unconditional five-year guarantee on equipment, (4) a fixed price repurchase contract to offer to buyers, and (5) supporting floor displays, promotion, etc. Employee leads were represented as being exceptionally important in developing commercial refrigeration prospects.

Critical analysis of one's daily habits and plans in developing new non-residential gas

customers was strongly urged by Harry A. Sutton, Public Service Electric & Gas Co., Newark, who offered a proven system for "Making the Most of Salesmen's Time." Careful and exhaustive market surveys before attacking any group of prospects is most essential, he stated. Equally essential is the keeping of accurate data files.

"Markets are *minds*, and not *people*," according to F. W. Lovejoy, vice-president, Socony-Vacuum Oil Company, who inspired the conference with his experience concerning "Modern Sales Approaches and Methods." It's what the customer *thinks* that makes him buy—not what may actually be! The root of good salesmanship is hard-hitting *merchandise*."

Adjournment to the meeting room for the afternoon sessions brought to light a review by W. D. Crouch, Robertshaw Thermostat Company, on "The Expanding Market for Controls on Commercial Gas Equipment." It was his thesis that automatic operation achieved through controls has been a most important factor in the recent outstanding growth of the use of gas in commercial enterprise. An indication of the growing importance of controls was offered through the sales record of his company which, since 1932, has achieved an increase in the number of appliance manufacturers specifying his company's control from 22 to 175.

Beauty Parlor Symposium

Following Mr. Crouch, Arthur M. Apmann, Derby (Conn.) Gas & Electric Company, led a symposium on the place of gas in the beauty parlor, patterned after the popular "Information Please" radio program. Mr. Apmann presented a vest-pocket survey of the use of gas in the 80 beauty shops in his community of 40,000 population, 18 of these being interviewed and considered as a representative sample—and then called successively upon Walter S. (John Kieran) Anderson, Boston Consolidated Gas Company, Frank L. (F. P. Adams) Kay, Westchester Lighting Company and L. E. (Oscar Levant) Wagner, Providence Gas Company, Providence, R. I., to make presentations on various aspects of gas in the beauty field and stand the quizzing of the assembled conferees.

"One Hundred and Eighty Degrees Water Can Be Sold," said W. S. Walker, Consolidated Edison Company of New York, Inc., in winding up the Monday sessions. "Here's a market in which we can't



Luncheon meeting held during the industrial and commercial sales conference

complain of saturation or competition—let's go after it!"

Mr. Walker indicated that the average city has one commercial establishment of some kind which will require hot water for every 25 residents, and that, yet, he does not know of any company which has organized its sales activities to promote commercial water heating as aggressively as other branches of the commercial gas load. Public opinion and new laws are in our favor—covering such matters as: sterilization of utensils in public eating places, hand and chopping-block washing in butcher shops, utensil washing in all manner of food industries, etc.

Over-sizing of hot water installations was strongly cautioned against—the conclusion being "It's better to have an occasional installation prove too small than to have most of them too large and develop high bill complaints."

Extent of Heating Market

Resuming the conference on Tuesday, Arnold E. Schwarz, The Bryant Heater Company, emphasized that in "Selling Gas Heating to Main Street," one must realize that Main Street is "all over town." By way of demonstration, a directory of 56 classes of commercial establishments where gas heating sales can and should be promoted was distributed. The market for gas heating is tremendous, particularly in view of "a growing appreciation among merchants of the profit-making possibilities in utility service."

A planned program of sales, coupled with thorough and aggressive promotion, was strongly recommended. The classified section of the local telephone book was suggested as one of the best list-producing agencies for gas-heating sales prospects.

Every man at the conference was amazed at the extent to which gas is used (almost to the complete exclusion of other fuels) throughout the New York World's Fair, as described by Hugh H. Cuthrell, vice-president, The Brooklyn Union Gas Company, and president, Gas Exhibits, Inc. More important, however, was Mr. Cuthrell's demonstration of the manner in which this World's Fair usage of gas can be applied by every salesman of non-residential gas in the country.

Baker Favors Gas

Before Peter G. Pirrie, editor, *Bakers Weekly*, had surrendered the floor just before luncheon on Tuesday, his enthusiasm over the possibilities for gas sales in the baking field had spread throughout the conference. "The baker is just in the transition stage between the craftsman and the merchandiser, and, as a consequence, is contributing to a rapidly expanding field for gas equipment sales," said Mr. Pirrie.

Bakers were classified as retail bakers, wholesale bakers, house-to-house bakers, multiple unit bakers, chain store bakers, and group bakers—and each type was described in relation to its manufacturing and distribution problems. "The greatest rate of progress is being enjoyed in the retail baking field where 45 pounds of bread per hour per man is a reasonable output as over and against the wholesale baking figure of 400 pounds of bread per hour per man. These smaller bakers are very much interested in (1) control of the ratio between top and bottom heat in ovens, (2) flexibility in oven performance, (3) cleanliness, (4) automatic operation, (5) safety, and, of course, (6) comparative costs and economies."

It was also emphasized that the market for steam boilers in the bakery is larger than generally appreciated—in many cases more fuel being burned to supply the steam for the oven than is used to heat it. On the average, 1 boiler h.p. of steam capacity should be provided for every 100 pounds of bread per hour baked.

"The retarded dough process, new to most bakers within the past year and a half, is growing into tremendous importance in the baking industry." The speaker urged, "If as a previous speaker indicated, it is true that gas refrigeration has less drying effect upon refrigerated spaces, by all means tell that to every baker you meet—you have no idea as to what the correct type of dough retardation can do for a baker."

A timely review of the "Sterilization Movement in Public Eating Places" was presented by W. D. Tiedeman, chief, Bureau of Milk Sanitation, Department of Health, State of New York. According to this authority, most of the 13 state regula-

tions now in effect specify the method of sterilization, although the ideal would be to stipulate the result obtained as determined by satisfactory tests upon the sterilized dishes and glasses themselves. The merits of the various recognized methods of sterilization were outlined, it being demonstrated that hot water is far and away the most satisfactory.

Manufacturer's Message

Closer cooperation, especially in the promotional phases of commercial selling, was urged between manufacturers of equipment and utility salesmen, by W. Frank Roberts, president, Standard Gas Equipment Corporation. Mr. Roberts described how useful advertising, both by manufacturers and by the Industrial Gas Section of the American Gas Association, can be in convincing customers, and urged that increased appropriations for such promotion be provided. Careful market analyses and greater cooperation with dealers was urged.

R. J. Rutherford, vice-president, Worcester (Mass.) Gas Light Company, and president, New England Gas Association, stated that "the greatest fallacy in our industry thought is that we have only four market classifications—domestic, house heating, commercial and industrial. Actually, there are hundreds of classes of users, and each should be considered as a separate entity." A further study of industrial and commercial rates was urged, and it was recommended that we should have rates built around the type of utilization of gas rather than abstract brackets or "blocks." Such rates for additional classes of business would provide greater volume of sales and greater profits.

The belief was also expressed by Mr. Rutherford that, in the future, commercial gas utilization will see more and more appliances specialized as to function (e.g. boiling operations could be greatly developed with special equipment in much the same manner as frying operations have multiplied with the introduction of the deep fat fryer). He ended on the theme, apparent in every one of the addresses comprising the conference, that the commercial gas business is bound to grow steadily and profitably with coming years.

Most Modern Hotel Chooses Gas

FROM the lands touched by the Seven Seas came the materials to furnish the new Hotel Vancouver, Vancouver, B. C. No effort was spared to make this a hotel whose accommodations and cuisine would be the most modern in the world.

The main kitchens with auxiliary services cover almost an acre of space. Here the centre of the food-preparing system consists of 11 sections of gas ranges, with three salamander broilers, two sections of double roasting ovens and two charcoal type broilers. All the ovens in these ranges are equipped with automatic thermostatic controls.

In the butcher shop a gas flame is used for singeing poultry. The banquet kitchen or service pantry on the first floor has four gas ranges, two salamanders and a ceramic broiler.

On the fifteenth floor the cabaret is served by four gas ranges in addition to a large ceramic broiler and two salamander type broilers. In the staff kitchen another battery of four gas ranges with large oven capacity thermostatically controlled, is to be found.

This huge hotel needed a clean, economical cooking fuel to serve a maximum of 6,000 guests in a single day. That's why Canada's newest, most modern hotel chose gas for cooking!

INDUSTRIAL & COMMERCIAL NATIONAL ADVERTISING FOR JULY AND AUGUST

The Advertising Committee of the Industrial Gas Section, J. P. Leinroth, chairman, and F. B. Jones, vice-chairman, announces that full-page advertisements will appear in the following trade and business magazines during the months of July and August:

Magazine	Date	Topic
American Restaurant	July	Gas for Commercial Cooking
Bakers Helper	July 22	Improved Bake Ovens
Bakers Weekly	July 15	Improved Bake Ovens
Ceramic Industry	July	Gas in the Ceramic Industry
Food Industries	July	Gas for Heat Processing of Foods
Heat Treating & Forging	July	Gas for Heat Treating Metals
Hotel Management	July	Gas for Commercial Cooking
Industrial Heating	July	Gas for Heat Treating Metals
The Iron Age	July 27	Gas for Heat Treating Metals
Metal Progress	July	Gas for Heat Treating Metals
Metals and Alloys	July	Gas for Heat Treating Metals
Modern Hospital	July	Gas for Commercial Cooking
Steel	July 24	Gas for Heat Treating Metals
American Restaurant	Aug.	Gas for Commercial Cooking
Bakers Helper	Aug. 19	Improved Bake Ovens
Bakers Weekly	Aug. 12	Improved Bake Ovens
Ceramic Industry	Aug.	Gas in the Ceramic Industry
Food Industries	Aug.	Gas for Heat Processing of Foods
Hotel Management	Aug.	Gas for Commercial Cooking
Industrial Heating	Aug.	Gas for Heat Treating Metals
The Iron Age	Aug. 24	Gas for Heat Treating Metals
Metal Progress	Aug.	Gas for Heat Treating Metals
Metals and Alloys	Aug.	Gas for Heat Treating Metals
Modern Beauty Shop	Aug.	Gas Hair Dryers
Modern Hospital	Aug.	Gas for Commercial Cooking
Steel	Aug. 28	Gas for Heat Treating Metals

Non-Residential Sales Promotion On Parade



National promotional efforts designed to support non-residential gas sales work are assuming such wide proportions that it's wise to step back now and again and study their extent, their nature, and their trends. To this end, the eight 3 x 4 foot panels here pictured were displayed before the Industrial Gas Section of the American Gas Association both at the Cleveland Industrial Gas Sales Conference and the Tulsa Natural Gas Convention. Five of them, under the banner "The Industrial Gas Section rolls up its sleeves—to promote GAS in industry and commerce," summarized the non-residential promotional activities of the Association itself. Three, labeled "Pitching In for the Common Cause—to promote GAS in industry and commerce," sampled the individual efforts of the utilities, the manufacturers and the gas industry press.

The Industrial Gas Section's exhibited items included publicity,

advertising, papers, speeches, bulletins, handbooks, service letters, and photographs of displays at national trade shows. Each panel carried a typed sheet statistically analysing the scope and achievements of the one phase of the entire program it represented. Manufacturers' and utilities' items consisted chiefly of high grade direct mail work, outstanding national advertising, and idea-rich catalogs. A copy of each of the ten gas industry magazines was opened to a feature illustrated article, developed by the editorial staff of that journal and concerning industrial or commercial phases of our business.

The panels created such great interest, and so tersely summarized so extensive and important an industry program, that it is planned to keep the exhibits up-to-date and make their display a regular feature of each future get-together of members of the Industrial Gas Section.



Restaurant leaders get first-hand information on the use of gas at the New York Fair while guests of the Washington Gas Light Company. In the photographs are, left to right: Leon Ourusoff, Washington Gas Light Co.; Robert J. Wilson, executive secretary, Washington Restaurant Association; Hubert H. Keller; Theodore Sloat; Julius Lulley, all three past presidents, Washington Restaurant Association; Thomas M. Offutt, Washington Gas Light Co.; E. J. Boothby, vice-president and general manager, Washington Gas Light Co., and Mr. Lulley

Restaurant Association Leaders Entertained at Fair

OPPORTUNITY seldom gives the slip to the hotel and restaurant business-seekers of the gas industry. When leading restaurateurs from all over the world recently convened in New York for the International Restaurant Conference, the Washington Gas Light Company represented by E. J. Boothby, vice-president and general manager, Leon Ourusoff, engineer of utilization, and Thomas M. Offutt, assistant manager, industrial department, were quick to round up the 50 leaders and officers of the Washington Restaurant Association who were in attendance and stake them to a cocktail party and dinner at the Gas Exhibits Building at the World's Fair, from 5:00 to 9:30 P.M., June 16. Arrangements were made through the Industrial Gas Section of the American Gas Association which cooperated with the host gas company.

George Rector, himself a restaurateur-extraordinary, veteran of Broadway's traditionally dear "Rectors," and official host for the gas industry at the World's Fair,

welcomed the group in behalf of the gas industry and "talked shop" for a few minutes recounting amusing experiences from his own colorful career. Rector also arranged a special menu for the dinner-for-dinner-producers in the Court-of-Flame Restaurant, which followed cocktails in the Court-of-Flame Club.

Prominent among the fifty guests were Julius Lulley, proprietor of Harvey's Restaurants, and past president, Washington Restaurant Association; Robert J. Wilson, executive secretary, Washington Restaurant Association, and field secretary, National Restaurant Association; Hubert H. Keller, Tally Ho Shoppe, and past president, Washington Restaurant Association; Theodore Sloat, Garden T Shoppe, and past president, Washington Restaurant Association, and W. O. Wheeler, Wheeler Catering Company, Indianapolis. Outstanding was the fact that at least two-fifths of the group was feminine, a fair representation of that fraction of the food purveying business commanded by women.

Gas Plays Role of Health Guardian

GAS fills an important role in the state health laboratories at Hartford in determining whether or not some 165,000 samples and cultures sent for examination to the laboratories by physicians, health officers, and the like, contain disease-carrying bacteria. Gas is employed in no less than 17 different processes in this type of work, being used in all three divisions of the laboratories, those of chemistry and physics, of microbiology, and of serology.

The first named division examines milk, cream, water, ice, sewage, trade wastes, river waters, clinical thermometers and the like. Diagnostic examinations in microbiology determine the presence or absence of the germs of typhoid fever, paratyphoid, diphtheria, tuberculosis, some venereal diseases, rabies, undulant fever, pneumonia and many other communicable diseases. The division

of serology determines the presence or absence of other diseases, chiefly venereal. These processes require some 60,000 cu.ft. of gas monthly.

Gas is used in Bunsen burners for heating solutions under examination; sterilizing bacteriological inoculation needles; flaming tubes, bottles and pipettes during examinations; heating water to sterilize instruments, rubber gloves, syringes, etc.; heating distilling flasks during tests; igniting and drying precipitates and residues under chemical examination; making distilled water; operating ammonia stills; operating steam baths and water baths; operating of dry heat sterilizing ovens; generating steam to operate autoclaves for pressure sterilization; heating hot plates for evaporizing solutions; operating gas stoves (hot plate type) for preparation of bacteriological media and preparing washing solutions for washing laboratory glassware; operating blast lamps to be used in repair and manufacture of glass apparatus; heating water to supply laboratory hot-water taps.

GOING AHEAD with Industrial Gas

"Retarded dough is the best investment a retail baker can make today," concluded William Entenmann, baker of Bayshore, N. Y., while recently addressing 350 conventioners of the N. Y. State Association of Manufacturing Retail Bakers. With retail bakers feeling that way, we ought to go places in adapting the new commercial gas refrigeration units to bakers' dough boxes.

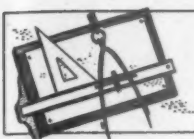
Incidentally, non-residential gas was on its toes at the above-mentioned baker's conclave. We saw Carl Roll of Brooklyn Union, Chairman, A. G. A. Commercial Baking Committee, Clint Cole of Rochester Gas & Electric, last year's chairman of the A. G. A. baking group, and Harry Smith of A. G. A. Headquarters, all taking notes at a mile-a-minute clip.

The New York World's Fair is an ideal showroom for non-residential gas in action. Some 202 buildings, exhibitors or concessionaires use our fuel and the latest in industrial and commercial gas equipment to do their volume cooking, water heating, space heating, display lighting, heat processing, dish sterilization, commercial refrigeration, baking, food manufacturing, etc. Take a prospective customer out, and show him gas at work in the "World of Tomorrow."

Cooperation gets publicity. Sample? Henry Hartmann of Brooklyn Union sold an industrial air conditioning job to Eberhard Faber for facilitating pencil lacquering operations. Your Industrial Publicity Committee took a few pictures, wrote a little copy, and talked to an editor or two. Result—an effective illustrated page in the June issue of "Heating, Piping and Air Conditioning." Look it up, and use it to help sell a job in your own territory.

The first Commercial Refrigeration Handbook, recently released by Roy Wilson's Commercial Refrigeration Committee, has scored a big hit. If you need extra copies, you'd better move fast as the supply is dwindling.

A few prize clippings from the Industrial Publicity Scrapbook to illustrate effective selling of gas service to man-sized audiences: "Gas Brooding Preferred," "Poultry Tribune," April (450,000 cream-of-the-crop circulation); "Gas-Cooled Refrigerator Adapted to Commercial Use," "Business Week," June 10 (110,000 circulation among advancement-minded business men); "Gas-Fired Equipment Drops Peanut Roasting Cost 50%," "Food Field Reporter," May 1 (13,000 circulation to food processors).



Technical SECTION

F. M. GOODWIN, *Chairman*
A. M. BEEBEE, *Vice-Chairman*
H. W. HARTMAN, *Secretary*

Production and Chemical Conference Attacks Gas Industry's Operating Problems

ATTACKING the technical problems of the gas industry with vigor and intelligence, more than 300 delegates attending the annual joint conference of the Production and Chemical Committees of the American Gas Association, exchanged information on a wide variety of subjects. Held at Rochester, N. Y., May 22-24, the conference was judged outstanding in every respect. The formal program was augmented by three luncheon conferences at which delegates were encouraged to present their individual problems for discussion.

F. B. Parke, The Brooklyn Union Gas Co., Brooklyn, N. Y., as chairman of the Production Committee, directed that part of the program. The Chemical Committee program was arranged under the direction of E. M. Bliss, Public Service Electric & Gas Co., Harrison, N. J., chairman of the committee.

Country Club Session

A highly successful innovation was the holding of the Tuesday afternoon session at the Oak Hill Country Club in Rochester—after which the visitors were entertained through the courtesy of the Rochester Gas and Electric Corporation.

Herman Russell, president, Rochester Gas & Electric Corp., welcomed the delegates with an optimistic account of the natural advantages of the gas industry. He particularly emphasized the importance of the production and chemical men in maintaining the high efficiency necessary to the industry's progress.

In the first paper of the session, H. W.

Seyler, Carnegie Steel Co., Clairton, Pa., described experiences involved in the cooling down and reheating of 12 Koppers ovens at the Clairton coke plant of his company. Mr. Seyler concluded that "by-product coke ovens of the Koppers type may be successfully cooled down and reheated without serious damage."

Following Mr. Seyler, L. E. Knowlton, Providence Gas Co., Providence, R. I., presented an interesting review of the enforced shutdown and speedy resumption of coke oven operation during the recent hurricane and flood in Providence.

Air Conditioning Covered

A timely contribution on "The Outlook for Gas Fuel in Summer Air Conditioning" by W. F. Friend, Ebasco Services, Inc., New York, was presented by K. B. Castle, of Rochester, in the absence of the author. Mr. Friend's paper, which was illustrated with slides, gave a clear picture of the extent and possibilities of this load.

"Light Oil Scrubbing for Gum Formers" was the subject of an informative paper by S. Green, The Brooklyn Union Gas Company. Mr. Green described the removal and recovery of the gum forming light oils present in the water gas manufactured at the Citizens Works as well as the manner in which existing plant equipment was adapted to this work.

The first session closed with a progress report of the Gas Conditioning Committee by O. S. Hagerman, Atlantic Seaboard Corp., New York, chairman of the committee.

Monday afternoon was devoted entirely to the popular round-table luncheon meetings which were divided as follows: Coal Carbonization and By-Products, Charles Koons, Koppers Co., Kearny, N. J., chairman; Water Gas Operation, W. E. Lebo, Public Service Electric & Gas Co., Harrison, N. J., chairman; How the Chemist Can Help the Operating Engineer, W. H. Fulweiler, consulting chemist, Philadelphia, chairman.

A joint paper by O. B. J. Fraser and G. L. Cox, of the International Nickel Co., Inc., New York, opened the second session, Tuesday morning. This paper covered the results of a number of corrosion tests of metals and alloys in the by-product coke industry.

A complete description of a modern tar handling and treatment system in connection with heavy oil operation was given by K. B. Weber, Consolidated Edison Co. of New York, Inc.

Combustion Research

Research methods and results of the project on "Composition of Flue Gas After Combustion with Insufficient Air," sponsored by the Committee on Industrial Gas Research of the American Gas Association, were next presented by L. O. Howell, A. G. A. Testing Laboratories, Cleveland.

New and significant data on the properties of silica brick which make them desirable for coke oven construction were outlined in a paper by Dr. W. C. Rueckel, Battelle Memorial Institute, Columbus, Ohio. Dr. Rueckel also evaluated a study



These men were very much on the job at the Production and Chemical Conference. Left to right: F. B. Parke, chairman, Production Committee, W. K. Beard, H. W. Hartman, secretary, Technical Section, W. H. Fulweiler, E. M. Bliss, chairman, Chemical Committee, and A. M. Beebee, vice-chairman, Technical Section



Technical and operating experts of the gas industry who participated in the conference included, left to right: L. O. Howell, R. H.

Strader, S. S. Tomkins (inset), A. Pulver, R. Fulvender, G. M. Kirkpatrick

of the various factors which have influenced the life of ten batteries demolished in the last few years.

Prof. Wilbert J. Huff, University of Maryland, College Park, Md., presented a joint paper by himself and Dr. Frank H. Dotterweich, Texas College of Arts and Industries, Kingsville, Texas, entitled "A Note on the Wetting of Iron Oxide Samples Before Testing." The results of experimental work carried out indicated that, with one exception, there is little difference in the activity of the colloidal oxides whether the water be acquired in the vapor form or by mechanical admixture. From the study of these two methods of preparing oxides for the activity test, it was concluded that the application of water in the vapor phase is desirable.

E. L. Sweeney, Boston Consolidated Gas Co., Everett, Mass., described "Practical Control Methods for Operation of Gas Purifiers." The principal factors governing oxide purification listed and considered were: selection of material, filling of boxes, use of carrier, operation of boxes, revivification, sampling and analysis of material, control records and cost.

A newly developed "Specific Gravity Recorder" was demonstrated and described by its inventor R. L. Ellis, Florida Power & Light Co., Miami, Florida, in the final paper at the Tuesday afternoon meeting.

The closing day's meeting opened with a discussion of the Curran-Knowles Process of coal carbonization by M. D. Curran, Coal Carbonizing Co., and Radiant Fuel Corp., St. Louis. This process utilizes the Sole Flue Type Coking Oven, where coal charge is spread in a relatively thin layer on a horizontal hearth which is heated from beneath. The layer of coal is usually 10" to 12" thick and from 8' to 10' wide and 30' to 40' long, depending upon the size of the oven chamber for a particular installation.

John Dopp, Wisconsin Power & Light Co., Fond du Lac, Wis., explained the use of heavy oil for enrichment in combination with 100 per cent bituminous coal as generator fuel. He presented complete figures on operation and costs in connection with such operation on a reverse flow machine. He concluded that "with present price differentials between gas oil and heavy oils, substantial savings may be made by using the heavy oil for carbureting purposes."

A valuable contribution covering the experimental work on expansion of coal under coking conditions, conducted by the U. S. Bureau of Mines, was presented by J. D.

Davis in a joint report by Mr. Davis, H. S. Auvil and J. T. McCartney, all of the Bureau.

Another joint paper by A. R. T. Denués and Wilbert J. Huff, Department of Chemical Engineering, University of Maryland, dealt with "Mechanisms for Recording the Combustion Characteristics of Gases."

Emphasizing the need for accurate methods for determining the water vapor content of gaseous fuels, A. W. Gauger, F. C. Todd and C. C. Haworth, all of The Pennsylvania State College, in an interim report, gave a detailed description of the results of their investigation of this subject to date. A survey of the literature available was included.

The burning of pulverized coke breeze for steam generation has been the subject of considerable attention at the Rochester Gas and Electric Corp. for several years. I. G. McChesney, of the Rochester company, in a comprehensive paper, described the installation and experience with a 3000 lb. per hour Foster-Wheeler ball pulverizer which was installed on a 750 h.p. boiler. The installation was completed in March, 1938, and "after several months of testing and development seems to be a satisfactory method of burning coke breeze."

Following the custom of the past few years, the conference closed with an open forum discussion.



The Water Gas luncheon meeting, pictured here, was a popular feature of the conference. The dignified-looking group on the right is composed of: J. D. Alden, C. A. Schlegel, M. P. Novak, F. J. Pfluke, and L. M. van der Pyle

A Bibliography on Cathodic Protection of Pipe Lines

Compiled by LUIS HILT

Librarian, American Gas Association

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James G. O'Keeffe Dies Suddenly

JAMES G. O'Keeffe, general superintendent of manufacture, gas department, Public Service Electric and Gas Co., Newark, N. J., died suddenly June 9, at the Stamford Hospital, Stamford, Conn. He was taken ill at the June meeting of the Society of Gas Lighting, in the Woodway Country Club, Stamford.

Mr. O'Keeffe started with the company as a cadet engineer in the Front Street Gas Works in 1907, after being graduated from Stevens Institute of Technology. In 1909 he was transferred to the gas distribution department, becoming superintendent of Front Street Works in 1911 and two years later superintendent of the Market Street Gas Works.

In 1918, he was transferred to Trenton as superintendent of the Brunswick Avenue Gas Works, returning to Newark District as engineer of manufacture, Essex Division, in 1922. He was made engineer of construction in 1925 and general superintendent of gas manufacture in 1926.

Mr. O'Keeffe was a member of the American Gas Association, New Jersey Gas Association, Society of Gas Lighting and the New Jersey Society of Professional Engineers.

Charles W. Smythe, formerly assistant general superintendent of manufacture, gas department, was promoted to general superintendent, succeeding Mr. O'Keeffe, according to an announcement July 6 by John A. Clark, vice-president in charge of gas operations.



Laboratories

N. T. SELLMAN, *Chairman, Managing Committee*
R. M. CONNER, *Director*
F. O. SUFFRON, *Supervisor, Pacific Coast Branch*

Plan New Pacific Coast Branch Laboratories

IN view of the increased volume of appliances submitted to the Pacific Coast Branch of the American Gas Association Testing Laboratories for approval in recent years and particularly in the last year, the present accommodations at 718 Towne Avenue, Los Angeles, Calif., have become inadequate to meet the added demands of the industry. Although the number of testing engineers has been augmented, it became necessary some time ago to rent additional space in another building for storage purposes. For this reason, a survey of possible new locations for the Laboratories was conducted during the last year by A. F. Bridge, member of the Laboratories' Managing Committee, and F. O. Suffron, of the Laboratories' staff.

On Saturday, May 13, the Laboratories' Managing Committee met in Los Angeles to consider the purchase of a satisfactory site and construction of a new building. Accompanied by W. C. Beckjord, vice-president of the American Gas Association and member of the Finance and Control Committee, the committee visited a number of prospective sites.

The Hostetter Tract located on the corner of Downey Road and Eleventh Street, approximately 5 miles from the center of Los Angeles, was deemed most desirable. This property comprises approximately 21,000 square feet and is located in a district with definite building restrictions.

Board Approves Plan

The Executive Board of the American Gas Association at its meeting May 15 approved the purchase of property and erection of a new laboratory building. The final choice of the site of the proposed building was left to the discretion of the Laboratories' Managing Committee.

Following the action of the Executive Board, active plans for the construction of a new building were set in motion by the Laboratories' Managing Committee on May 16. A. F. Bridge and R. M. Conner were appointed a committee of two with power to act in the purchase of a site and consummation of all proposed plans for the construction of the new laboratory building.

After considerable negotiation, the Hostetter Tract was purchased on May 29. Arrangements were made with the Southern Counties Gas Company of California to supply the necessary engineering and supervisory assistance in the construction of the new laboratory. In view of the familiarity of the engineering staffs of the

local gas companies, their cooperation is invaluable and will be of the greatest assistance. Grateful acknowledgment is given at this time to Mr. Bridge and other members of his organization for their very generous help.

Plans for construction of the new Pacific Coast Branch Testing Laboratories are already under way and it is hoped that the building permit will be secured and the contract for construction awarded early in July.

Tentative plans provide for an earthquake-proof structure with approximately 10,000 square feet of floor space incorporated in a building of the most modern design. This proposed new structure will provide more than twice the floor space afforded by the present leased quarters and thus insure ample gas appliance testing facilities for the Pacific Coast section of the industry.

Laboratories' Engineers Enter Industry

AFTER three years of service with the American Gas Association Testing Laboratories in several capacities, Stanley F. Jaros and Donald E. DuPerow have resigned to become associated with member manufacturer companies.

Mr. Jaros has served in both the testing and research departments of the Laboratories. He has had thorough experience in testing various types of domestic appliances. For the last six months, he has assisted in the preparation of requirements for bake ovens and semi-rigid tubing and fittings. This experience has afforded him an excellent background for his new responsibilities as heating engineer for Servel, Inc., Evansville, Ind. Mr. Jaros received his Civil Engineering Degree from Ohio State University in 1933. During his employment with the Laboratories, he attended the Cleveland Law School and received his diploma on June 8 of this year.

Mr. DuPerow has also had a thorough training in various departments of the Laboratories. After about two years spent in testing work, he was promoted to the inspection department where he has been engaged for the last year and a half. This has given him wide acquaintance with the manufacturers of approved equipment. Mr. DuPerow has joined the staff of the Lincoln Brass Works, Inc., Detroit, Mich., as

engineer. He came to the Laboratories from Ohio Northern University where he received the Degree of Mechanical Engineer in 1936.

A. G. A. Engineer Honored

AT the June 1 meeting of the Junior Division of the Cleveland Engineering Society, George J. Pacanovsky, engineer in the research department of the A. G. A. Testing Laboratories was awarded the Leadership Medal for his distinguished services as chairman during the last year. This is the second year in which Mr. Pacanovsky has been singularly honored; last year he received the Distinguished Service Medal from this society.

Although associated with the Laboratories for less than a year, Mr. Pacanovsky has participated in several of the research projects recently completed by them. At present he is engaged in a study of the use of parallel thermocouples for the various temperature measurements encountered in gas appliance testing and research work.

Chemistry, Hand-Maiden of Gas Industry

THE gas industry will become ever-increasingly a chemical industry according to a forecast made in England recently at the annual meeting of The Institution of Gas Engineers. Made in the Murdoch Centenary lecture by E. F. Armstrong, the forecast drew the following editorial comment from *The Gas World*, June 10 issue:

"Thus it is that Dr. Armstrong foresees the future of the gas industry. He sees that it will become ever-increasingly a chemical industry. That coke will one day disappear, converted into methane or other combustible gas, the reason for this being that 'coke adds to the revenue of the gas industry, not to its profits.'"

"He foresees the time when a new Perkin will arise among us to utilize coal tar to better advantage. He sees the gas industry converting gas into petrol during the summer months in accordance with the technique now developed by the oil industry. Carbon dioxide may well be extracted from coal gas converted into 'dry ice' for refrigeration purposes.

"Although he does not mention it, may it not be that we shall recover ethylene and certain other gases and convert these also into chemical products? The gas industry must expand."

GAS AT WORLD'S FAIR

(Continued from page 262)

the Glass Center where skilled glass blowers ply their ancient craft in front of an automatically controlled gas-fired glass furnace. In this exhibit gas is employed for every process of the industry which is shown.

There are numerous other exhibits at the Fair in which gas fuel plays a part. Reciting names and uses, however, is not necessary. The success achieved in selling and installing gas for practically every industrial process does indicate the position that gas has attained in the industrial world as a result of the Fair. It also shows the opinion of industrial engineers who are being further influenced because of the satisfactory manner in which gas fuel is demonstrating its flexibility, efficiency and economy.

All-Gas Home Exhibit

While it is proving its value to American business and industry, gas is also demonstrating to the public its superior service in the home. In Homewood, the house sponsored by *Good Housekeeping Magazine* and our industry, the public is able to see how gas can provide carefree automatic service. This exhibit of a modern home is making a definite impression upon the millions of visitors to the Fair. It is arousing the interest of the public and of women leaders who influence public thought. We are also represented in the Town of Tomorrow. House numbers 1, 6 and 15 are all-gas houses. Gas appliances are in five other houses in addition to the three above. The Association's Home Appliance Bureau has done an excellent job in this connection and is to be congratulated. This will redound to our advantage if we utilize it effectively in our sales and promotion efforts.

No outline or story of gas at the World's Fair would be complete without mention of the use of gas for spectacular effect and for lighting. Gas is the agent representing fire in the dramatic and feature attraction of the Fair—the nightly show in the Lagoon of Nations. There for the entertainment of visitors the elements of fire, water, color and light are combined in a stupendous spectacle.

This show in the Lagoon of Na-

tions presents the most spectacular use of gas lighting in the Fair grounds, but it is not the only one. Gas is used for spectacular effect and for illumination in the Gas Industries Building, for fountain display in Plaza 3, for decorative illumination at the Business Systems Building and for illumination in the entire Court of States area. Thus gas lighting takes a conspicuous part in adding to the spectacle, drama, decoration and illumination of the World of Tomorrow.

Utilizing Fair Prestige

I have tried to present a general outline of gas at the World's Fair and to indicate the predominant position our service occupies. The accomplishment is a very real one, for it gives us an opportunity to present ourselves in the favorable light of satisfactory service to American business and industry as well as to the public. We can feel gratified with the results of our efforts as millions of Americans—our customers and prospects—make their way from every state in the union to visit the World's Fair and get an idea of the World of Tomorrow.

Yet we should not sit back and feel that we have shown up our competitors. We need to solidify the gains we have made. We must take advantage of our position and utilize the promotion and publicity we have been getting in a manner that will increase our sales. And that calls for sound

thinking, intelligent planning and real hard plugging. Only in such a way can we realize fully on all the potentialities opened to us as a result of the success of our efforts to dominate the Fair.

It is not my intention to present a plan of procedure to you, but I do want to repeat a few basic ideas which are fundamental to successful capitalization upon our endeavor at the Fair. As individuals concerned with the sales of gas service we should have a sound general picture of gas at the Fair. We should know what our service is doing there. Only in that way can we get across our story to the public. Knowing what has been accomplished and where and why gas is used in the Fair grounds is essential to conveying the idea to customers that gas provides a superior service in the domestic, commercial and industrial fields of today and tomorrow.

It is necessary that we carry on our promotion in a national manner, that we think as a united industry. In this way will we meet today's competition of industry against industry. In this way will we effectively get across the idea of gas providing carefree automatic service in the home and economic flexibility in commercial establishments and industries.

Then we can follow up in our local communities on the national promotion. We can tie in our efforts with those of a determined, modern, united industry to prove to America that gas fuel provides an essential service in the World of Tomorrow.



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New Restaurant Has Gas Refrigeration

THE latest use of gas refrigeration equipment of the commercial type on a large scale is that of the new Crosby restaurant in the Carnegie Medical Center Building, Cleveland, Ohio, which was opened to the public on June 13.

The refrigeration equipment consists of nine Servel Electrolux commercial units. The various uses to which these units are put include the operation of storage compartments for the keeping of dairy, meat and vegetable products, maintaining salads and frozen desserts in a fresh condition, preservation of fish, cooling of water and other beverages, and the retarding of dough and preservation of ingredients for the making of cakes in the bakery department.

Munroe Award To Be Made

ONE of the highest honors within the gift of the gas industry, the Charles A. Munroe Award, will be presented at the annual convention of the American Gas Association in New York City in October. This Award, consisting of a substantial sum of money and a permanent certificate, is made annually by the Association to the individual judged to have made the most outstanding contribution toward the advancement of the gas industry.

An accomplishment on any phase of the gas business may be considered. For instance, since the first Award in 1929, it has been given for developments in refrigeration; labor-saving accounting; rate making; dealer cooperation; sales expansion; public relations; research; and change-over from one to another kind of gas. Applications may be sent to Association Headquarters at any time but they must, under the rules, be received before August 1, 1939.

The recipient of the 1939 Charles A. Munroe Award will be selected by a committee from applications submitted. The committee consists of O. H. Fogg, vice-chairman of the board, Consolidated Edison Company of New York, Inc., New York, N. Y., chairman; Robert A. Hornby, vice-president, Pacific Lighting Corp., San Francisco, Calif., and R. H. Hargrove, vice-president, United Gas Pipe Line Company, Houston, Texas.

Gas Decontaminator

A SPECIAL gas-heated wash boiler has been introduced in England which is designed for heavy duty for the safe and speedy decontamination of articles of clothing which have been subjected to wartime gases. Complete decontamination of all garments is provided for by the inclusion of a special grid fitted to the inside of the lid to ensure that the clothes are totally submerged. The boiler is described in the *Industrial Gas Times*, June 1939, on page 316.

CP Feature Article

FEATURED in the June issue of *Good Housekeeping* is an attractively illustrated two-page spread entitled "You've Got Something in a CP Gas Range," by Helen E. Ridley and Adrian N. Clarke. Supplemented by strong copy, which begins "CP means something in a gas range," the article is designed for high reader-appeal.

This issue also carries 11 pages devoted to a complete description and photographs of Homewood, The All-Gas—Good Housekeeping Home which is now on exhibition

at the New York World's Fair as part of the Gas Industries Exhibit. A bulletin of 20 pages with complete illustrations of the home, including kitchen and utility rooms, is being offered by *Good Housekeeping* for 10 cents. The booklet is complete with descriptions, costs of rooms, color schemes, etc.

Gas Is So Cultured

WHEN a foreigner living in Moscow refused to buy a gas range from a Soviet salesman, saying he preferred the coal stove, the salesman replied: "But gas is so cultured."

The *New York Times* commented editorially on this use of the word "culture" as follows:

"It sounds a bit odd but as a matter of fact it makes good sense. Without wishing to stir up 1914 memories of the word 'Kultur' it may be pointed out that in a scientific sense culture means civilization, and civilization means the whole standard of living. It has been often pointed out that the French as a matter of course treat cookery as part of civilization. When they bestow decorations on famous chefs or raise monuments to the discoverer of Camembert cheese there is no condescension about it."

ALTHOUGH we believe that something like 85 percent of the sales effort that places one of our stoves in the home of a customer must be exerted by the dealer, we know that it takes our national advertising, directed at the women of America, to bring the customer into the dealer's store.—STANLEY E. LITTLE, vice-president, American Stove Company.

A Picture of Gas Range Selling

PICTURES of prospects, their motives and their minds plus a real story of gas range selling are contained in an attractive 28-page pamphlet recently distributed by Robertshaw Thermostat Co., Youngwood, Pa. Elaborate pictorial messages drive home the theme, "How Women Can Save Money with Oven-Heat-Control." The pamphlet, which is entitled "More Income from Gas Ranges," also contains facts on baking, roasting, canning, whole-meal cookery, and cooking hints.

Personnel Service

SERVICES OFFERED

Valuation and Rate Engineer. Fifteen years' broad experience in valuation work and rate design of large natural gas transmission and distribution systems. Can qualify as expert witness before federal courts and commissions. Now employed in responsible position in valuation department of major gas transmission and distribution company. Best references given. 1289.

Appliance Service Manager: experience design, manufacture of controls, burners, pilots as well as sale, installation, service of industrial, househeating, refrigeration and domestic appliances. Can set up central department or laboratory for group of companies to coordinate service efforts. Graduate Chemical Engineer (39). 1290.

Young man (37) fourteen years' experience water heaters—supervisory capacity—charge of service and installations—assistant to branch manager—correspondent—general office routine—special representative contacting architects and utilities—some selling experience—however selling connection not desirable—desires affiliation. 1291.

Accountant and assistant to comptroller: 3 years' industrial work. 14 years' diversified accounting including supervisory public accounting experience, including costs, taxes, system installations and revisions, auditing; specialized in public utilities. Recently completed numerous natural gas financial statements and data for petitions to State Public Service Commission. 1292.

Engineer, superintendent, valuation, manager—graduate engineer with broad experience in operation and construction of works and distribution; design, surveys, estimates and procurement for plants including byproduct recovery. Recent experience in valuation of complete gas and other utilities; reproduction, original cost and property records; inventory pricing and cost analysis. 1293.

SERVICES OFFERED

Experienced factory sales representative desires connection in that capacity, preferably in the Southern States. Familiar with cooking, water heating, refrigeration, space heating and miscellaneous appliances. Has extensive following among utilities, plumbing jobbers, food service equipment houses, hardware, furniture and department stores and major appliance dealers. 1294.

Industrial Sales Engineer, college graduate, seven years' operating experience, seven years' sales experience with large utility. Familiar with all phases industrial and commercial sales. Will consider public utility connection or equipment manufacturer connection in line allied to gas industry. Married (40). 1295.

As sales manager, salesman, purchasing agent, or factory representative. Twenty years' experience in practically every branch of the business, have been connected with three of the largest gas companies in greater New York. Excellent record. 1296.

Secretary-Executive Assistant, fifteen years' diversified experience in advertising, personnel, purchasing, travel, office and departmental management. Excellent correspondent. Nine years with large gas and electric utility in various supervisory capacities. For past six years manager of large stenographic department. Gregg shorthand writer. Inexhaustible worker. Imaginative. Personality. Go anywhere. 1297.

Engineer now in charge of air-conditioning and heavy duty equipment department of small utility wishes connection with larger utility company. Has outstanding record for successful installations and load building. Also capable of taking charge of personnel training and activities. 1298.

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